



METHODOLOGY AND OBJECTIVES

Professor Menon has explained that the stages of administrative growth, a title for these lectures that was suggested by him, is a new area. Both he and I like to explore new areas and hence I am pleased to have this opportunity. If the lectures are a success, then Professor Menon deserves the credit. If they are not, then I take the blame.

This is a good time to explore new areas because both in public administration and in economics there are strong movements toward re-thinking and toward change. I shall refer to these briefly because they are questions that you are bound to be concerned with in all your work.

In the past few years there has been a great deal of criticism of economics, not only from economists themselves but from others as well. For one thing, economics has assumed static conditions as the basis of its thinking, on the ground that it is impossible to develop a science of economics on any other basis. Economics is also said to deal too exclusively with the individual firm and not enough with what is now called macro-economics, or the economics of whole societies. More and more, economists are being forced to devote their attention to the problems of developing nations. When so large a part of the world, in terms of both population and numbers of countries, is concerned with growth, economists also must be concerned with growth. It seems pretty clear, therefore, that economics is going to have to change to become a dynamic as contrasted with a static subject.

An additional factor is that even in the strongholds of classical economics, the economics of the United Kingdom and the United States, the emphasis has turned from

the question of marginal utility to the input-output factors of economic growth. Almost without exception the outstanding British and American economists are concerned with growth. Parenthetically, from my point of view as an administrator, I think they sometimes go too far in the apparent belief that all problems will be solved through faster growth and greater volume. There are also the problems of distribution, of equilibrium, of purchasing power so that people can buy the commodities that flow from this vortex of production. It is too simple to say that a constantly increasing volume of production will cause every country in the world quickly to achieve a high level of consumption. But let us not labour that issue.

The point I would make is that economics—which is one of the areas we are concerned with in the relation between the growth of the economy and the growth of administration—economics is sustaining a frontal attack which inevitably will cause it to change. That the old conditions of static equilibrium no longer suffice: first, because the problem of developing nations cannot be explained in those terms; and secondly, because even in the more developed nations, the emphasis is now on how to stimulate additional growth.

Indeed, the question of growth is becoming a basic one not only among developing nations but in many others as well. The economy of the USSR is said to be growing at the rate of 8 per cent. In Europe, since the end of World War II, the economy has been growing anywhere from 6 per cent to 8 per cent, although it is now slowing down because the consumer demand that was backed up as a result of the war has now been taken care of. The economy of the United States is growing at the rate of, at most, 3 per cent or 4 per cent. The question of growth, therefore, is now a factor in the political competition between capitalism and communism.

In the field of public administration, which is the other one that we are concerned with, there is the same leavening, the same dissatisfaction with old approaches. To some extent this also is due to assumptions that formerly were static. For the most part, in terms of writing and scholarship, public administration has been a phenomenon of the 20th century, beginning with the scientific management movement which dealt almost exclusively with questions of engineering such as organization and process, and the static approach was assumed to be appropriate. A little later—around 1940 or thereabouts—there was a revolt against organization as the dominant or almost exclusive emphasis in public administration and the emphasis shifted to human relations. But this, in its turn, was superseded perhaps around 1955 or so. Today, the growing edge of public administration is in the area bounded by a concern for policy formulation, decision-making, and the structure of the economy.

These are some of the reasons for the importance of a course on the stages of administrative growth. The current discontent with both public administration and business management—a subject that I study as much as I do public administration—is due to the fact that we are not producing enough competent administrators able to deal with economic policies and objectives, who understand the structure of the economy, and who can see the priorities. It would be improper for me to try to tell you how important this is to India because I have been here for so short a time, but you will immediately see the importance of it yourselves. It is equally important for the United States. To succeed today, businessmen and public officials alike must become economic statesmen.

In a book entitled Vitality in a Business Enterprise, the president of the American Telephone and Telegraph Company—which is the world's largest corporation—made two major points and argued that if these two policies were adopted, then the business enterprise in question, no matter how large, would have vitality. The first point is that everybody in the organization must be ethically minded, and the second one is that they must be planning-minded and able to look twenty years ahead. Big business must

understand government, which is its natural enemy. It must understand organized labour which might possibly produce a "labouristic economy". The top executive of a corporation must understand technology and the demands of consumers because the revolution in the kinds of things that people buy will continue. The businessman must also understand international trade and international relations because in the next few years world competition will get stiffer, partly because developing countries will get into the scramble for world trade and partly because many communist nations are becoming increasingly competent in this area.

When I visited the USSR with the Executive Committee of the Conference of Governors studying administration in 1959, the principal question of interest to Khruschev and Mikoyan—and we were with them for three hours—was trade. They did not want to talk about anything else. They opened the conversation by saying, why don't you in the United States trade with us? Their talk was all of trade, their offensive was economic. Today Chou En Lai of communist China is in Africa, also looking for trade.

The point is that in business there is needed a new kind of training to prepare businessmen to understand those areas which heretofore have been the domain of statesmanship, dealing with issues such as survival, economic policy, economic objectives, policy-making, and decision-making. This is sometimes called the field of behavioural science. I am not quite willing to admit that that is the best way to describe it because behavioural science is often merely the quantitative method and this is not enough.

The same trend is occurring in public administration. During the past year when I have spoken to executive development groups, I have found that the principal theme is policy-making. Of all the subjects on which I have spoken, the one most often requested is called Program Formulation and Decision-Making. In the United States, emphasis is increasingly on the substance of policy which for the most part means economic policy.

To summarize for a moment, this is a good time to be considering the stages of administrative growth because in both economics and public administration there is a strong movement toward change. Static assumptions no longer suffice. People are looking for a dynamic concept of economics and a dynamic concept of public administration. It seems clear that public administration will move very auickly in the direction of economics, in the direction of policy, in the area of what the administrator does, what he deals with, why he decides, and what the priorities are all of which is economics. I am reminded of what Professor William A. Robson said when as a young man he wrote his book on Justice and Administrative Law. In his preface he remarked that the most important combination of subjects in the future would be economics, political science, and law. It just happens that that was Mr. Robson's own interest. For my part, I say that the most important combination of subjects in the future will be public administration and economics. That happens to be my interest so you will have to discount what I say on the subject.

Today I want to suggest to you some of the hypotheses that I shall be working on in these lectures and that I hope you will question. I want to suggest to you some of the rich areas of reading and exploration that I hope you will undertake, not only now—I realize you are busy now because students are always busy—but at some later time. I hope you will become so intrigued that you will read in these areas and go into them deeply.

If a static economics and conventional political science are now in the process of being altered, what are the fields, the organized bodies of knowledge, from which they may be expected to draw? One of these is clearly economic history. I want to say a word about that.

Ever since Adam Smith there has been a continuing argument between the economic theorist and the economic historian. The economic historian holds that the only valid way to develop a theory to study stages of economic growth,

the growth of institutions. If as a result of this study a theory is developed, it is likely to be a valid one. But the reverse process of trying to develop a theory to fit history will not do. Many economic historians regard much economic theory as having always been wrong. To this the economic theorist replies—as you might expect—that economic history is interesting so far as it goes but that the objective is to develop a science so as actually to measure factors such as value and marginal utility, in order to guide business decisions; and for this, economic history is not enough.

One of the things I discovered when I wrote the book that you will see in your syllabus, The New American Political Economy, is that the place to learn about entrepreneurship and stages of economic growth is in economic history and especially in case studies in that area.

Since I have mentioned this book, let me tell you something about it, because one of the things I try to do in my lectures is to get people interested in studying books. Even if students cannot take the time to read at once, they should know something of what is in certain books so as to be able to go back to them when the material is needed.

The first part of my book deals with the importance of public policy in the modern world, with the relation between economics and politics, and then with the concept of political economy. Political economy is the relationship between the private and the public fields, between economics and politics, and is the basis for the kind of decision-making that I referred to earlier. Then the history of political economy is traced, and this is the part that you may find useful in the present discussion. There are many longer accounts. An excellent one that is not in the syllabus is by Overton Taylor, The History of Economic Thought. It starts at the time of mercantilism and comes down to the present day, with great awareness of the political and administrative factors that are involved. It is perhaps the best book I have ever read on the history of economic theory.

The second part of my book is concerned with principles of political economy, including one that I think would interest you: the concept of the public interest. In that, some of the so-called principles of classical economics and how they apply to this older and larger field of political economy are discussed.

The third part of the book discusses the need for governmental reform, especially in the United States, and some rather radical recommendations are made, one of them being that we have responsible political parties. That does not sound radical to you but in the United States it is. Another recommendation is to adopt a modified form of cabinet government—that is really radical—that we have more continuity in policy, and that top civil servants be granted far more authority in the policy area than they now have. Probably the part that is most relevant to this lecture is a brief discussion of the history of the concept of political economy.

In addition to economic history, there is the field of administrative history on which to draw in re-thinking the disciplines of economics and administration. Let us see what is available here.

In the syllabus there are three references to books by Leonard D. White. White was a pioneer in public administration in the United States, and although he wrote perhaps as many as thirty or forty books, these three, written from the historical standpoint, are probably the most likely to have a continuing influence.

If you are interested in going into the subject more fully, there is a book by Lloyd Short that gives a detailed history of the growth of administrative organization in the United States. This book was written about twenty years ago and is still interesting.

Generally speaking, administrative history has not received much attention, and, therefore, a fertile field for research—and I understand you are interested in research—is case studies in administrative history.

Another area that we are bound to be concerned with is sociology, and on that score I have included several references to books written from a sociological viewpoint. A little later I shall refer at greater length to one of them, The Sociological Imagination, by C. Wright Mills.

As Professor Menon has indicated, the book that has the closest relationship to these lectures is by W. W. Rostow, The Stages of Economic Growth. And in that connection I would also call your attention to a book by W. Arthur Lewis, a former professor of economics at the University of Manchester, called The Theory of Economic Growth.

Since we are dealing with books, let me mention a few others that are listed in this brief bibliography. Robert Heilbroner's *The Making of Economic Society* is valuable primarily as an analysis of the stages of economic growth and the principal problems that the author sees in the future. He anticipates more state activity, and believes that public administrators will have to be trained in economics or they will be in trouble.

A second book by Heilbroner, *The Great Ascent*, deals with the problem of developing countries. In my opinion he is one of the most able economists in the United States and anything he writes is sure to be interesting.

Before I came to India I read as much as I could find on planning and economic development in your country, and some of these books are included in the bibliography. Although some of them may be more appropriate for a course on planning, I want the emphasis here to be on economics. As I have said, we must move rapidly to train public administrators in economics, economic policy, and the relation of public administration to economic policy. By these means, public administrators will be prepared to give policy guidance to the nation, which then will not need to rely so exclusively on members of the political parties and of Parliament.

I do not say this disparagingly because I am a former lawmaker myself. Nevertheless it seems clear to me that

in any country, the greatest concentration of brain power is needed in the field of economic policy, objectives, and planning priorities, and that these abilities must be in the higher civil service because they will never be really forth-coming from the members of the legislature. Consequently, the higher civil service must study and recommend policy to their political superiors, after which it is the political superiors who must decide and assume responsibility. So long as the political appointee makes the decision and assumes this responsibility, my belief is that a well-trained public administrator with a grasp of economic policy can be as aggressive as he likes—indeed, it is his patriotic duty to be aggressive. I think this is the new opportunity for the public administrator that we are going to create.

Getting back to the bibliography, I have included a reference to Gunnar Myrdal, Beyond the Welfare State, for two reasons. First, it is a good discussion of the welfare state, and secondly, he calls attention to a problem that very shortly we will all have to deal with. Once there is a welfare state in all countries—and he believes there will be—then there will appear the problem of how to get away from parochialism and nationalism so as to encourage international trade in line with the apparently immutable economic principle of relative natural advantage. According to this principle, each country should concentrate on its own natural advantage and then exchange goods and services with other countries for the things it lacks. Myrdal believes that the time has come when policy-makers and decision makers must be concerned not only with the welfare state but equally with how to encourage prosperity by encouraging international trade.

Of the books I have read on India, the most useful in terms of this particular lecture, or group of lectures, are by Krishnamachari, Fundamentals of Planning in India, and by Gadgil, Planning and Economic Development in India. There is a great deal in both of these books on the structure of the economy, which is the reason I have included them here.

Of the books that deal theoretically with this subject, the one I admire most is by Williamson and Buttrick, which, although written in 1954, is in many ways still the best. In addition, anything by Galbraith, including his lecture on "Economic Development in Perspective" is sure to be interesting. His book, The Affluent Society, also is relevant to this series of lectures, the reason being that we are going to be concerned with stages of economic growth as well as with administrative growth, and one of these is the affluent society. The complexities that face the deciders of policy make this stage the toughest of any.

I have also included a book by Reddaway, The Development of the Indian Economy, which came out only last year. I have done so partly because I am a perverse person and want to give you something really tough to read, and partly because I think there is so much in the book that you should become familiar with. It is a good rule to read a book that is a little too hard for you because that is the way you improve, and Reddaway is difficult. As an economist he uses a complicated vocabulary and some difficult concepts, but there is much in it of practical value and a great deal on the development of the Indian economy. Just as a test, read as much as you feel like and see if you understand it. Then, perhaps in a year or two, take it up again and see whether you understand it better than you did the first time. It will repay the effort.

Before leaving the subject of the bibliography I should also like to suggest a device that applies not only to this particular field, but to all fields. Go to the library to that section which begins with the letter T (which means economic history) and look at all the books in it. You will find not only economic history but also the relations of business and government, economic organization and structure, regulation) and public enterprise among the main topics. Just browse; skim a little in all of these books—there are only two or three rows of stacks—and see what is there, because one of the assets of an administrator is to know where to find the information he wants. A main

advantage, I think, of an academic course is to acquire a clear idea of the structure of knowledge, where the relevant information can be found, where the books are. None of us can do as much reading as we would like all at one time but we can always go back and find that which helps us to round out our knowledge or adds to our wisdom at some future time. So much for bibliography.

Now I want to turn to some hypotheses. I start with the proposition that public administration is conditioned and limited by and receives its opportunities from the total society of which it is a part. I am now talking sociology, and it is an important aspect of the matter.

In other words, public administration cannot be expected to differ very much from the rest of the society of which it is a part. If the leadership in the rest of society is of a particular character, for example, then the chances are good that leadership in the public administration sector will be similar.

My second proposition is that because of the peculiar nature of their occupation, public administrators in the modern world are one of the principal—if not the principal—means to social change. Perhaps this sounds like a contradiction: first, I have said that administrative leadership is determined by the character of leadership in society as a whole, and now I say that when social change occurs, it is most likely to be by means of the public administrator.

But is there any real inconsistency between these two propositions? Perhaps you are beginning to see why I have insisted that when people begin to think of stages of growth, public administration moves into the area of policy and decision-making, into the determination of policy for the political economy, if I may use that term. I have already said that political economy is the relation between politics and economics. It is what the leaders in government and the leaders in the private sector must know and do together in order to maintain a viable economy. And a

viable economy is one that is characterized by a growing prosperity and by the capacity to survive.

No doubt in your sociology courses these two foregoing propositions have been set forth. Now I want to suggest something that has not been studied to the same degree and where further research is needed. Hence the third proposition runs as follows: In individual enterprise there is always the stage in which it is being created, and then the stage in which it engages in regular operation. In all aspects of administration, including the type of leadership that is needed, there is a considerable difference between these two stages. Generally speaking, to create a new enterprise requires an outstanding individual with the ability to inspire people and to overcome obstacles, a sort of driver type, sometimes called by the economist the enterpreneur. My observation is that both in government and in the private sector, the same characteristics are needed for the establishment of a new undertaking. I could give you a number of case illustrations but will cite only one.

When I was Assistant Secretary of Labour, one of the laws that the Department got through was the Wage and Hour Law under which, on jobs in the federal government and in interstate commerce, a ceiling was placed over the number of hours a person might work at the regular wage, and a floor was put under his wages, below which they could not fall. It was an important and controversial law. When we searched for some one to create the new organisation that would administer it, we had to try three people unsuccessfully before we found the right man. Those who failed all had high reputations in the labour field and they were able administrators of existing programmes, but apparently they were not the kind who could create a new one where none had existed before.

This is an important idea for India because there will be many new programmes launched here and conscious attention must be given to the kind of qualifications needed for success. Your Minister for Steel and Heavy Industry seems to be the kind of person, in my opinion—and it is

only an opinion—who, because of his personality and other characteristics, could probably tackle a new enterprise in any field and make a success of it. You just get that feeling about him.

The next proposition I want to suggest—and remember, these are hypotheses that will run through all of these lectures and that we will question, which is why I am putting them on the table now—the next hypothesis, then, is that organizations go through particular stages of growth. Most of the study on this subject has been in the private sector—in large corporations rather than in government. I should like to see this subject studied in State governments also, to see whether the general observation that has been noted with regard to large corporations is true for State government as well.

In the United States, economic historians have made some excellent studies—like the history of the Standard Oil Company of New Jersey, for example, and of some other large corporations—and certain conclusions have been developed. The bibliographies are found in my book on The New American Political Economy, and you may wish to look at them. The general observation is that the stages of growth for the individual large firm are these:

First there is the robber-baron type of enterprise, like that of John D. Rockefeller Senior's Standard Oil Company: ruthless, hard-hitting, destroying and absorbing its rivals. Generally speaking, the leaders at this stage also are of a similar type, one reason being, no doubt, that they are so sure of themselves. By means of robber-baron methods they demolish opposition, absorb competing businesses, and build an empire. In the Rockefeller case the empire was so great that it was prosecuted by the federal government under the antitrust laws and the corporation was required to be dismembered.

Once an enterprise has gone beyond the first stage, it becomes orderly and efficient and the charismatic kind of leader does not seem to be able to run it successfully any

longer. He is not sufficiently methodical and systematic. What is now needed is the manager type, the man who understands system, who knows order, and who still has entrepreneurial ability.

The third stage occurs when the order that characterises the second one is carried to excess, the enterpreneurial quality is lost, and bureaucracy in the damaging sense takes its place. The first stage was enterprising, pure and simple. The next stage was a combination of both enterprise and orderly management. Now the enterprising aspect drops out and the whole emphasis is on management.

At this point, unless the undertaking is to slow down and hardier competitors are to get the better of it, there occurs the fourth stage in which the entrepreneurial characteristic is restored by means of a new kind of leadership. Frequently a corporation goes outside of itself to secure the kind of person that is needed at this crucial point.

That is as far as I am prepared to go, except to say that the history of every corporation that has been studied seems to confirm Aristotle's belief that institutional growth follows a pattern modelled on the swing of the pendulum. It tends towards an excess of bureaucracy and an overemphasis on system, then it swings back to entrepreneurship. This seems to be true not only of the enterprise characteristics but of all other institutional characteristics that have been examined, such as the important question of centralization versus decentralization, for example. In other words, studies of large corporations indicate that there is no such thing as a static condition of equilibrium. Under any criterion, such as entrepreneurship versus system, or centralization versus decentralization, this swing occurs first in one direction and then in the other. The search is for equilibrium but equilibrium is never attained for more than a moment.

A final thesis that is pertinent here and one that we will make much use of is W.W. Rostow's analysis of the stages

of economic growth. Since our time is up now, however, we will postpone the discussion of that important question and I will start my next lecture with a consideration of it, for it is a continuation of the hypotheses relating to the stages of administrative growth.



THE STRUCTURE OF THE ECONOMY

At our last session it was explained that the title of these lectures, "The Stages of Administrative Growth", was inspired by Professor W. W. Rostow's book, *The Stages of Economic Growth*. Today we are to examine Professor Rostow's thesis because it is basic to the development of our own.

Professor Rostow is a distinguished economic historian. At the time he wrote this book he was a professor at the Massachusetts Institute of Technology. He is now in charge of the Policy Planning Staff of the United States State Department and in that interesting position he and his group develop for the Secretary of State both short-term and long-term strategy having to do with political, economic, military, and other considerations. In the area of External Affairs this is a most important policy group and I mention it to show something of Professor Rostow's professional qualifications for writing as he has.

The book appeared in 1960 and I think it no exaggeration to say that its influence has almost equalled that of an earlier book by A. A. Berle, Jr., and Gardiner C. Means, The Modern Corporation and Private Property, published in 1933, which has had a revolutionary impact on thinking in the social sciences.

Rostow argues that if all of the nations of the world today are analysed as to the degree of economic development they have achieved, it will be found that for the most part they fall into five main categories: the traditional, the preconditions, the take-off, the mature, and the affluent.

The first category is the traditional, the one in which many emerging nations find themselves. Generally speaking,

they are characterized by the greatest poverty, the greatest illiteracy, and the lowest level of economic development. It is estimated that some two thirds of the people of the world live in these so-called have-not nations.

The dominant characteristic of this category is its traditionalism. Advancement towards later stages of growth depends upon the degree to which nations aspire to and are able to achieve technology, industrialisation, a high level of education—all of which are called modern. In the traditional society there is not this urge. Instead, society is dominated by certain traditional factors having to do with taboos, belief-systems, ways of doing things, and other kinds of rigidities. Consequently there is no disposition to change. And until there is this disposition there will be no progress towards modernization and industrialization.

In people's aspirations to improve their standard of living, therefore, a major factor is that they themselves must wish to change traditional ways that interfere with modernization, and until they do there is not much that anybody else can do about it. No amount of leadership from government or from the United Nations is likely to have much effect until the people's psychology alters and they begin to aspire to change. If they continue to reject change, there will be no movement towards the next stage of economic growth. But when there does appear a strong desire to change, so that people are willing to give up those traditional views that stand in the way of industrialization, then things begin to move.

Another characteristic of the first stage is that generally speaking, the government plays a limited role. True, in terms of the totality of the society, it does a good deal because of course the people must rely on it for basic services such as the protection of life and property and the collection of taxes. But for the most part these responsibilities are carried out in a traditional and often in a heavy-handed and inefficient way.

The second stage, according to Rostow, is the preconditions stage, so-called because there are certain conditions that must be met before there can be any advance toward a higher stage. The most essential need in terms of pre-conditioning is the kind of leadership from the government that will supply a knowledge of economics, of objectives, and of administration. In other words, there must be better public administration before a nation can move into the next higher stage of development.

Certain other skills must also be provided for. There must be some rudiments, at least, of science as the basis for the development of a technology. Educational institutions must be created. Electrical and water power and improved transportation must be provided. Experience in the developing countries shows these to be the main preconditions of progress into higher levels of growth.

Sometimes the preconditions stage lasts for a long time but once it has been mastered, once the pre-conditions are met, then there begins to develop a certain momentum. The hardest transition is from the traditional to the pre-conditions stage because it involves psychology. If a people have a desire to change they will bring it about; then momentum begins to build up and, generally speaking, it continues to grow.

The third stage is the one in which the take-off occurs. The take-off is an economic term describing the period during which a country begins to develop capital, to create industrial and economic organization, and to produce what the economist calls a multiplier. The multiplier is a shorthand way of saying progression according to a rapid formula applied to an increasingly wide field of economic undertakings. Or putting it another way, the more there is growth, the more rapidly does it appear in all areas and the greater is its magnitude. Once a certain point of growth is reached, then it is like putting money in the bank: the more is put in and the longer it is kept there, the more it multiplies. Similarly with the economy: once the necessary capital has been supplied, then an accelerator, a multiplier goes to work and the increase broadens and accelerates.

The fourth stage of economic development is one in which all of the needs of a modern economic system have been provided for. For want of a better term, this is called a mature economy. It is not a good term but Rostow was unable to think of a better one. This means that in addition to having the capital that is initially needed, there is a mechanism built into society by means of which people with sayings can channel them into additional investments. A nation in this stage has a technology; it is able to carry on research; its technology produces goods and servicesby either private or public enterprise—that are salable either for home consumption or abroad. In order to meet all of its home needs, the nation increases its trade with other countires. If a nation has nothing to sell except its basic resources, some other country profits from the use of them, whereas with enough organization and capital, with labour and capital both highly employed, the selling price also is high because it is for finished goods; the nation profits from the use of its own resources.

The important factor in this fourth stage is structure. Institutional arrangements are reasonably complete, and in their total effect there is the equivalent of a modern industrial system.

The fifth stage is an especially interesting one and I shall discuss it for the most part in relation to my own country. It is called the affluent stage, a term coined by Kenneth Galbraith to describe a period characterised by mass production. In this stage there are extremely large units of production, with industrial enterprises that in size and wealth become rivals of the state. There is big government, big labour, big agriculture. The emphasis is on production, the underlying idea being that with a standardized product turned out in large volume, the unit cost is so low that it raises the standard of living of the people and puts the country in a favourable competitive position relative to the rest of the world. The result is a constantly rising prosperity.

This fifth stage has a greater revolutionary effect on administration than any of the four preceding ones. You

have already observed certain factors common in all four of the carlier stages, one of them being administration. A nation cannot rise above the traditional stage without administrative leadership. One of the pre-conditions—the most important pre-condition of rapid economic development—is administrative leadership, administrative skills. A nation cannot move into the take-off period without a good supply of managerial ability. All this network of economic, political, and social development having to do with investment, sales, the use of savings, and the use of technology and production must be mastered, again illustrating the indispensability of the administrative factor.

Thus, in the mature society the point is reached where administrative skills are more or less evenly distributed throughout the entire economy. Able administrators appear not only in industry and government but also in other areas such as agriculture. At this point, the need is for people resembling Plato's guardians: people so wise and statesmanlike, of such wisdom, and possessing such a combination of executive drive and the ability to establish objectives and to make decisions, that they are really paragons of virtue and action.

Although I do not propose to dwell upon this now, let me simply say in passing that if the developing nations ever look with envy upon those that have reached this fifth stage—and that means the United States and the USSR—they should remind themselves that in many respects the problems emerging in it are far more subtle and complicated and difficult to solve than those in any other stage, and that this is especially true of administration.

A main problem is the tendency in large organizations to intensify specialization. But the leadership of these institutions requires people who are not only specialists but who also are statesmen, whose outlook is both broad and profound. In the fifth stage the requirements are such that it is still a question as to whether or not society can continue to produce people capable of supplying this kind

of wise statesmanship. I am not trying to appeal to your sympathy, however, because obviously, once a nation reaches affluence, prosperity is widespread and sympathy is misplaced. It is merely that prosperity constitutes an enormous challenge to the powers of leadership.

Having now stated the Rostow thesis, let me make some comments. It is important that we ask ourselves to what extent this thesis is valid and reliable.

First of all, it should be said that Rostow himself regards his analysis as an arbitrary one and by no means the only one that may be made. But it has a certain utility for certain purposes. Taking it as a starting point, we should constantly refine it by examining each one of these stages more fully and in the light of the conditions that prevail in a particular country. In any field of thought it is necessary to recognise universals, the common factors that appear such as history, culture, and belief-systems, and hence in every country it is necessary to take account of these factors in order to achieve a realistic kind of planning for growth. The procedure is to start with Rostow's thesis, refine it, determine what the peculiarities are of the nation in question. Such peculiarities relate to matters such as the age of the culture or the political system, or the influence of the dominant religion. Taking these factors into consideration, it should then be possible to make an adaptation of the Rostow model that will be useful. It is never possible to copy such a model in every detail, of course, but it does supply ideas to be thought out in terms of a particular nation's own special characteristics.

For our present purposes, the Rostow analysis clearly underscores the role of administration and helps administrators to understand the importance of their own part in promoting national development. Such an approach is more effective than the former one of describing administration, as a matter of fixed rules and static categories which, if understood, may be used in any country under any conditions at any time with equal success. When one understands the stages of growth, one realizes that to be effective

one must know where one stands in history and in the institutional development of one's country.

The best discussion of this subject is in a book that I referred to in the last lecture, *The Sociological Imagination* by C. Wright Mills. Mills says that in all of the social sciences—and he thinks that in reality they all merge into a single discipline—there are always three factors to be considered; and since this is true of all the social sciences it is equally true of administration. The three factors are these:

First, there is always a *time* factor, which for our purposes is a particular stage of national development. I shall not labour that point because Rostow has already explained it.

Secondly, there is what Mills calls biography, or the personality factor. In our analysis, it means certain types of personalities becoming available at certain stages of development in order to overcome difficulties and encourage further growth.

Third, there is structure. Being a sociologist, Mills uses this term a little differently from the way we do in public administration. He means the point at which the institutional arrangements of society come into contact with stubborn problems. It is the point at which social pressures make their impact upon institutional arrangements, which must then adapt if the resulting problems are to be solved. Without institutional adaptation, there is no progress. People become dejected or even neurotic and cannot operate effectively. But if institutions can adjust themselves to these forces so as to achieve what society wants to achieve, then there is widespread good feeling, people are satisfied and self-confident, and can go on to higher accomplishments.

On this question of structure, let us look a bit further into the Rostow thesis because I think that along with Mills, he offers an insight into what structure really is. The dynamic view of structure is institutional adjustment

to change and to impinging social forces. The same concept may be used in public administration to combat the rigid mechanical view that organisation is a matter of models, that there is one model for one aspect of organization and a different one for another. This is all right in its place but in the fundamental analysis that we are trying to make, it is not as satisfactory as the dynamic view offered by Mills and Rostow.

Yet another comment may be made on the Rostow thesis. Some people object that the theory of stages of economic growth raises all the issues that once appeared in the argument over evolution. "Shades of Herbert Spencer", they say: "Are you going back to social statics? We thought the idea of social evolution had been discarded long ago." The answer is, of course, that the theory of the stages of growth does not represent evolution if by that is meant an inevitable, inherent, or predestined improvement over what was before. Let us examine this a little further.

The principal critic of the theory of evolution is the anthropologist and one of the best treatment of the subject is a book by H.G. Barnett called Innovation. viewing all the evidence of anthropology, Barnett concludes that there is no such thing as a continual uninterrupted rise in evolution. Rather, societies which were once the most gifted and developed in the world, some centuries later may be among the least developed. In other words, there are fluctuations, or to use Aristotle's term, there is the swing of the pendulum. For example, in terms of administrative skills and other criteria which Barnett adduces, a very high stage of deve opment once existed in the midst of the continent of Africa. And yet until recently, that part of Africa was known as the dark continent and generally speaking, today faces more problems of development than any other part of the world.

This is an important lesson for administrators. We sometimes think we know all there is to know about our craft and that our methods are about as effective as they can be made. This view leads to complacency and the

assumption that the only way we can go is forward. But obviously this is not so—it is possible also to regress. Hence the idea of an inevitable evolution is not what we are talking about when we speak of stages of growth. Rather, we are saying that at a particular stage—and we must identify it—there are certain characteristics and implications. Some of these are for administration and represent problems that are inherent in that stage of growth.

We must next consider the idea that the economy, as Rostow deals with it, is an organism. Here again is highly debatable ground because some sociologists and social scientists put great stock in the organic theory of society. whereas others have no use for it. A few years ago in political science there were two major schools of thought that relied on analogies to the physical sciences. were those who made a analogy to physics, who thought in terms of forces, and became interested in such questions as pressure groups. Then there were those who thought as biologists in terms of living organisms and applied the analogy to the state, to society, and to economics. For my part I find some value in the concept of the organic growth of whole societies, and public administration as a major factor in it. As I said in the last lecture, public administration may be fully understood only in relation to the whole of the society within which it operates because its opportunities and its problems stem from the whole social milien.

The best development of the organic theory was by Auguste Comte, the so-called father of sociology. Comte argued that in any society there are actions and reactions that constantly work on each other. If prices are artificially fixed in agriculture, for example, then by a process that Comte called circular causation—that is, action in one area reaching into every other area of society, as in the field theory of atomic fission—there would be the following effects among others: Price-fixing in other areas would be encouraged; labour would demand higher wages; consumers would object and become dissatisfied;

the burden of government would be increased by having to finance and administer the plan; inflation might be encouraged; and if prices were high they might discourage foreign trade. Some of these consequences are speculative. Not all are inevitable. But they do illustrate the interacting nature of society. The more developed a society becomes, of course, the faster do these circular causations occur. The higher a society rises in the five stages of growth set forth by Rostow, the faster do the interactions of various policies and decisions tend to increase, to accelerate.

Thus, I believe an organic economic theory to be valid and that the best way to understand public administration is to understand the stages of economic growth and the administrator's opportunity to guide and direct these stages in the public interest. I call this the political economy view of the stages of growth. Political economy is the managerial view of economics. According to this thesis, once a nation begins to create a technology, then every element of production must have a managerial orientation. The economy must be considered as a whole organism, the scene of constant interactions, so that in all areas including public administration, people must become self-conscious about what they are doing, must understand the structure of the economy and the interactions that occur within it. Otherwise the economy is in trouble.

The problem is this: There is a choice between, on the one hand, a regimented government under a dictatorship in which there is developed a plan to which people are forced, by means of sanctions if necessary, to subscribe. On the other hand there is the alternative of developing a scheme of economic advancement based on a widespread understanding of the organic nature of society and the interactions that occur within it. People with managerial skills made the plans and the decisions without compulsion, of their own free will, and are still able to make the system work. The more complex society becomes, of course, the more difficult it is to rely on these voluntaty methods

and hence greater degrees of sophistication, knowledge, and education are required.

According to this reasoning, political economy becomes the most important field of human knowledge and may become the basis for what William James has called a moral equivalent, in this case not of war but of dictatorship. In modern society, therefore, administrative statesmanship is the key to survival. Management is not a matter of routine behaviour in a set pattern of action. Rather, it is a matter of economic decision and the establishment of broad objectives. It is a matter of understanding the intricate structure of society and the effect of a particular policy upon all of its parts. Hence the manager or the administrator is like the political economist in the days of mercantilism. He studies what government and business must do together in order to produce economic stability and a better standard of life for society.

The importance of the structure of society and the economy lies in the fact that everything the administrator oes—whether in one of the earlier stages of development or in a later one—depends upon his grasp of how the structure of the economy develops and how the demands on administration develop along with it.

What are the main structural areas of a national economy? If we can agree on the answer to this question it will help us to develop certain skills that as administrators we need, first to identify a particular stage of growth, then to recognize and arrange priorities, and then to understand the interactions of our decisions.

I suggest that there are five main parts of which an economy is comprised. In some degree they occur in all economies but with many variations according to the weights given to each sector. I first had to use this kind of analysis when I was in charge of the United Nations Technical Assistance Programme in Turkey, and if I refer often to Turkey it is because this is the first experience I have had in a personal way with economic development.

In trying to develop Turkey's economy we identified five areas of the economy:

The first was agriculture.

The second was what for want of a better term we called the public-utility area, which generally speaking consists of transportation and electrical power, these being two of the principal needs in the pre-conditions stage.

The third area we called industry, and included in it financial institutions such as banking, investments, and the like.

The fourth area was welfare, including hospitals, medical care, social security, housing, slum clearance, and similar concerns.

The fifth area, a very interesting one but difficult to supply a name for, we called training and institution building. This is a catch-all category but an important and necessary one indeed.

If we study these five categories I think we will begin to realize how the thesis of stages of growth is confirmed by empirical experience, that is, by the actual experience of different countries in national development.

In 1953-54 when I was there, Turkey was 80 per cent agricultural. Business and industry were very new, amounting to only about 8 per cent of the economy and most of it had been developed within the preceding eight years or so. Public utilities had been created quite rapidly because of the aid programme. Roads and power plants were being built, these being, of course, the basis of a modern technology. The welfare field, on the other hand, was almost wholly neglected. About the only existing organisation was the Turkish equivalent of the Red Cross, the Red Crescent. There were no private voluntary agencies to deal with the crippled, the handicapped, the blind, and others in need of assistance. Consequently one of the first things we had to do in the United Nations programme was to lay the

foundation for the development of welfare agencies by establishing a school of social work in order to supply the trained people needed in the welfare area.

This category of institution building was a fascinating one because even in the short time I was there, some major accomplishments were achieved.

First, there was the encouragement of the accountancy profession, without which business cannot be sure whether they are making a profit or a loss; and if it is a loss, the economy also loses because there will be no money to reinvest. To advance through the five stages of economic growth there must be some kind of capital mechanism whereby profits earned in one place are reinvested in another.

Second was the establishment of a secretarial school. This profession had no prestige and nice girls did not become secretaries, so we had not only to develop a secretarial school but also to try to make secretarial work seem attractive. In the United States, of course, such work is a most desirable occupation—perhaps next to being an airline hostess—because there is no better way for a girl to meet a nice, attractive, wealthy businessman of marriageable age and inclination. We tried to convey something of this aura and prestige to the profession in Turkey.

Third was the encouragement of the radio television industry. There were some first-rate Turkish scientists and technicians in certain areas but none in radio and television. Therefore we had to decide, shall we induce foreign producers of radio and television sets to sell their wares to the Turkish people, or shall we train Turks to produce their own sets? We decided, of course, in favour of the latter course.

You see now what I mean by institution building. One starts with an examination of the five structural areas of the economy in order to discover what is lacking. Then the necessary skills must be developed under the heading of what Mills called biography. The third step, which is the

allocation of resources, is probably the most basic of all because resources are scarce and a mistake in allocating them may turn out to be nearly fatal. It is like a man's own financial affairs: if he has limited financial means and spends them unwisely his family may suffer the want of basic necessities. If a developing country makes a similar error, if it makes the wrong expenditure at the wrong time, the consequences may affect the whole future development of the nation. The temptation is sometimes to build monuments instead of institutions, to try to reassure the people by extravagance in matters that make a show such as public buildings. If this money were invested in the economy according to its particular stage of growth, with the right effect and according to the right priorities, the result might be like compound interest. The economic multiplier is something like that: a little money invested at the right time and in the right place produces large future returns on a compound basis.

Hence the importance of the administrator, of the manager in the process of nationa' development. With limited resources, he must be able to establish priorities and to make decisions among many programmes, all of which appear to be essential at the same time. But some must be postponed. Which ones can wait? Not only that, but one must survey the whole of the economy and accomplish something in every area because like administration itself, the economy also must move forward as a cohesive organism. Here again is the principle of circular causation.

Some additional illustrations will show how this principle works in practice. I have said that in 1953, 80 per cent of Turkey's people were engaged in agriculture, but with a few local exceptions her agricultual methods were quite primitive. There were few forests because they had been used for fuel, and in addition, goats were eating whatever seedlings and saplings appeared. With the forests largely gone, fuel in the rural areas was supplied by dried dung and hence no manure fertilizer was going back on the land. Rains washed the top soil from the fields. Sheet erosion

was widespread. With every generation Turkey was losing more of her irreplaceable natural resource, which is soil, and hence was becoming agriculturally poorer.

To handle such a problem, an administrator must understand the cycle of nature. I happen to be a farmer and go in for soil conservation practices. I have won a forestry award and am deeply interested in that subject also. So an important part of the technical asistance programme in Turkey—and it was a No. 1 priority—was to start a forestry programme. It did not cost much. We got three experts to come in and plant some trees and train some foresters, and we quickly began to get a renewed interest in forests. The greatest problem was the many goats that destroy young forest growth. It is also a political problem: For the sake of the forests the goats should be kept out of these areas. of course; but many peasants depend on their goats for meat and milk, the national forests are common grazing areas, and many votes may depend on allowing the goats to remain in them.

Once we got the forestry programme started we knew we were going eventually to solve a whole series of other problems. In time it would no longer be necessary to burn dung for fuel, so fertilizer would be returned to the land. More fertile land would mean better production and, indeed, Turkey did begin to export grains in world trade. Money earned from world trade is essential to national economic development. Thus, by concentrating on the agricultural economy and making it as efficient as possible, this trade is encouraged. In addition, plans were made to handle the foreseeable problem of people moving from the farm to the cities so that fewer farmers would have to feed more people.

This brings us to the point, I think, where we can say that although there are five main areas in the structure of the economy, the weight accorded to each differs so much at any given time that the weighing is often more important than the category. In 1800, 80 per cent of the people in the United States lived on farms; today the figure is

only 9 per cent, and yet, under modern methods, this small group produces several times as much food and fibre as all of the USSR. The means has been the profound revolution in farm technology and farm management which for the most part has occurred only during the last thirty or forty years.

We may conclude, therefore, that whether it is agriculture that is changing, or indutry that is expanding, or public utilities or educational institutions or welfare services that are being established, in every instance it is the fifth area—the area of training and institutional growth—that is to the forefront. It may also be concluded that at each stage of growth the weight and attention accorded to particular problems will differ because as one advances, certain parts of the development are gradually completed and attention shifts to others. Nevertheless, all five of these fronts must move forward in synchronization.

This comes close to being the key to the success of economic development. To achieve it requires a high degree of sophistication on the part of managers and especially public officials. Lacking this sophistication, there are bound to be serious mistakes in timing, in emphasis, in meeting the economic and social needs of the nation. If we are to produce the administrative skills required for economic development in the modern world, there is no substitute for an understanding of the various stages of growth by means of which nations advance.

THE UNITED STATES: A CASE STUDY

We have examined the theory of economic growth and the reciprocal action between the private and the public sectors, between economics and politics, and we have underscored the role of administration at all stages. Let us now come down to earth and develop a case study. Although I should prefer to discuss India as a test case, I am not that well informed on so complex a subject and hence you will forgive me if I speak about my own country. An additional reason for taking the United States is that its industrial history is short, the nation is economically developed, and hence the stages of growth stand out quite clearly.

In some ways, of course, the United States is not a fair sample. For one thing, its experience is not typical because the development of its economic prowess was something of an accident of history. The United States was colonised largely by Great Britain which at the time was the most capitalistic and industrialised nation in the world. We inherited a tradition in which there was no inclination to regard economic or business activities as inferior occupations. In addition, because of what Max Weber and others have called the Protestant ethic, there was already in the American tradition the idea that he who develops the economy of the country (that is, the businessman) is the servant of the Almighty and performs a high ethical function.

There have been some interesting discussions of the Protestant ethic, the most recent by A. A. Berle, Jr., whose book, *The American Economic Republic*, I have already referred to. Berle remarks that the Protestant ethic not

only sanctifies the making of money and the business activity generally, but also stresses the public responsibility of those who wield economic power. Hence, in the United States the public-spirited businessman has played an important role in the relations between industry and government. In emphasizing a strong sense of public responsibility, the Protestant ethic goes back to a principle of political economy which holds that with power goes a corresponding responsibility and that if the wielders of power do not recognize that responsibility they will soon lose their power.

Because we were a new country and inherited the first industrial revolution, therefore, and because we were for the most part the younger sons of families already sophisticated in industrial and business activities, and because in addition we had at our disposal the rich natural resources of a whole continent, we were obviously in an unusually fortunate position, and hence as a case illustration our experience is not exactly typical. Nevertheless, there is much to be learned from this experience, especially on a comparative basis, for the study of many cases will be required before any valid generalizations can be made.

In terms of Rostow's analysis of the five stages of economic growth, I have asked myself—because no one else has tackled this so far as I know—how these five stages show up in the economic development of the United States. Rostow admits that stages of growth is an arbitrary concept and I also must be somewhat arbitrary in applying the pattern in the United States. Actually, no period ends when another starts. Evolution occurs in a continuous process and hence demarcation between periods is more or less artificial.

On this basis, I suggest that in the United States the traditional stage of economic development extended from 1608 when the first American colony was established in Virginia (those in New England date from 1620), to 1787 when the Constitutional Convention initiated the change

from a loose confederation of states to our present federal system.

The pre-conditions stage lasted from 1787 to around 1820. It was during this period that the industrial revolution in England was reflected in its former colonies. It was also during these years that the United States became really sovereign, completing the transition from colonialism to statehood. The preceding traditional period had had a limiting influence on development, though not of the kind that erects barriers to the study of science or other new areas. During colonial days, Parliament in effect granted a monopoly to certain English companies, with the result that although the colonies were anxious to develop their own world trade, especially with the West Indies, they were not completely free to do so. But once sovereignty was won and the Constitution was framed, then the freedom to trade was secured and the pre-conditions period commenced. The steam engine was developed, factories were built, and resources were put to use. Major improvements were made in power, transportation, and communication. As noted in an earlier lecture, these are among the primary essential factors in a pre-conditions period.

The third stage, the take-off, I have arbitrarily set as occurring between 1820 and 1887. It was shortly after 1820 that we began to make use of general incorporation laws. This was significant because thereafter a man who wished to develop a business enterprise could take advantage of a general law already on the books to secure a charter from a state government, instead of having to apply for a special charter from the state legislature. This was a milestone in the history of economic institutions because it meant that no longer was incorporation a privilege granted by a ruler, but the right of any man with enough money and initiative and enterprise to go into business for himself. For this reason I take the beginning of this period as 1820.

For the end of the period I take 1887 because this was the year in which our most comprehensive regulatory law, the Interstate Commerce Commission Act, was passed, constituting a landmark in the evolution of American business-Government relationships. Before 1887 the economic role of government had been minimal; afterwards, that role began to accelerate rather quickly.

The fourth period, the one that is characterized as the mature economy, I have placed between 1887 and 1920. I chose this span of years because it was in this period that railroads expanded to cover the nation from one coast to the other (a distance of 3,000 miles). Business followed transportation, as it always does, and nationwide businesses developed as the precursors of a mass-production society. There was rapid development not only in transportation and industry but also in agriculture and, following the invention of the telegraph and telephone, in communications as well. Consequently, by the end of Woodrow Wilson's administration in 1920, a mature economy had been accomplished.

The fifth stage, Rostow's mass-production stage which culminates in what Galbraith calls the affluent society, I have arbitrarily set from 1920 to the present time, with the affluent society (and again this is arbitrary), beginning around 1945.

I say this period began in 1920 because by that time big business had become a reality and the assembly line was in operation. It was also in that year that the Supreme Court of the United States handed down a notable decision in the field of antitrust law, in the United States Steel case. Nevertheless, the affluent society was not immediately achieved. There were the depression years of the 1930's. Then there were the war years of 1941-1945 during which economic activity was very high but most of the nation's production went into the war effort.

In developing this outline I propose to ask your indulgence and instead of discussing each of these phases separately, I am going to superimpose on Rostow's pattern a somewhat different one that deals with the role of government during certain major periods. The first of these

is from 1787 to 1887, a span of 100 years; this was an era of limited government. The next period, from 1887 to 1920, was characterized by major regulation. The third, a short one from 1920 to 1933, was one of business self-government with government tending to do less than formerly rather than more. The fourth period, from 1933 to 1945, can only be characterized as the welfare state. And the fifth, from 1945 to the present time, is one in which the emphasis is on international concerns.

I am not suggesting, of course, that all five of these periods and types of relationship are commonly experienced in all countries; such is surely not the case. It just happens that this has been the course of evolution, the course of development, in the United States.

In discussing these five periods I hope to be able to show a reciprocal relationship between economic and political development. I should start, perhaps, by saying that I do not believe in economic determinism to the point of assuming that every governmental action is determined by economic factors. I do not believe, for example, that government is simply the executive committee of the ruling class. I do assume, however—and I suppose this is the position that liberals have always taken—a definite reciprocal relationship between the economic and the political, that both are part of the organism called society, and that in explaining what really takes place one must consider the whole of society. In other words, I am prepared to take the sociological viewpoint.

I should like now to examine in quick perspective some of the forces, the interrelationships, and the landmarks that accompanied the development of these five periods in which the role of government changed very rapidly. Perhaps the best introduction is to offer some statistics which I hastily gathered from an interesting book by Solomon Fabricant called *The Trend of Government Activity in the United States*, published by the National Bureau of Economic Research in 1952. From the first few pages of Professor

Fabricant's book the following figures will show graphically what has been happening:

In 1900, when 80 per cent of all the people in the United States were engaged in agriculture, only one out of 24 gainfully employed persons was in government service. By contrast, at the time that Professor Fabricant wrote in 1952, it was one out of 8.

According to more recent figures, out of a working force of about 80 million people in the United States, about 12½ million work for government in one way or another. The civilian force of the federal government is 2½ million employees, the military force is larger than that, and the state and local governments combined employ the largest public labour force of all. Professor Fabricant shows that from 1900 to 1949, total employment increased 120 per cent while total government employment—and this includes all levels of government—increased 500 per cent.

One of the most graphic points that Professor Fabricant makes concerns the total expenditure of the federal government, which increased from 1.7 billion dollars in 1903 to 16.7 billion dollars in 1939, and to 59.8 billions in 1949. In 1964 it is 100 billion dollars. In other words, from 1903 to 1964, a period of about 60 years, the increase in federal expenditures was from 1.7 billion to 100 billion dollars annually.

In every five dollars worth of capital assets representing property, continues Professor Fabricant, one dollar is part of the capital assets of the federal government, which in addition is now by far the largest buyer and consumer of all economic goods and services in the nation. As early as 1952, as much as one out of 20 units of net sales was to the government.

There is yet another sense in which government is the backbone of the American economy. Its requirements in such programmes as atomic energy, space exploration, and the military establishment amount to billions of dollars.

Government does not produce these things itself but contracts for them with the large private corporations. In short, the federal government is indirectly the largest producer and directly the largest contractor in the United States.

These figures are a useful basis for the points I would make about the five formative periods in American economic growth that I have suggested.

In the first period, from the drafting of the federal Constitution in 1787 to the passage of the Interstate Commerce Commission Act in 1887, the only appropriate characterization is that of limited government. As it turned out, the Constitution provided for sufficient powers to make government a powerful force. Theodore Roosevelt, Republican President, once remarked that under the Constitution the nation could unquestionably establish even socialism at any time a majority of the people wanted it. It is interesting, therefore, that the powers of the federal government were but sparingly used in the early history of the country.

The fact is the more interesting because one of the first American statesmen, Alexander Hamilton (Secretary of the Treasury and one of the great heroes of the Republican Party, which is the party of the businessmen) early in the 18th century came out with a Plan of Manufactures. Hamilton believed the purpose of government to be to serve the economy of the country. And the economy can be served only through the businessman. Therefore, government should develop a long-range plan of manufactures and let businessmen execute it. Consequently the strongest possible financial incentives or inducements should be offered to businessmen. Government should control the financial system—that is, the national banking policy because this also would encourage businessmen. If necessary, government should subsidize transportation, or any other activity that would promote trade and commerce. The ideal aim of American society should be to create a setting in which businessmen were offered the greatest inducements and the greatest possible scope for economic growth.

In this early period Hamilton's ideas were not popular, the reason being that most people favoured those of Thomas Jefferson, the leader of the opposition party which is now called the Democratic party. Jefferson advocated limited government and sought political wisdom in the theories of the Physiocrats, who as you know were a group of French economists who believed agriculture to be the source of all national wealth. Jefferson held that whenever there appears a concentration of economic power—whether in agriculture or industry or elsewhere—it tends to stifle people's ambition. Consequently it was Jefferson's view that the principal role of government is to prevent privilege and the concentration of power. Thus it was partly because of Jefferson's influence during these first one hundred years of the nation's life that the powers of the federal government were potentially large but sparingly used.

These powers were potentially large because already by 1803 the Chief Justice of the Supreme Court of the United States, Mr. John Marshall, in the case of *Marbury* v. *Madison*, had established the principle of judicial supremacy, which is the power of the Supreme Court to declare the acts of Congress and of the state legislatures null and void. This principle was later to play a major role in stimulating the growth of the federal government through the use of powers which were held by the Court to be inherent in the Constitution.

In terms of what later developed, the two most important express powers in the Constitution were the commerce power and the taxing power. The commerce clause permits Congress to regulate trade and commerce with foreign nations, among the states, and with the Indian tribes who were the original inhabitants of the American continent. Later, the commerce power was the principal means by which the government became active in regulating and controlling business. It was also the principal means by which government expanded its administrative agencies.

But in the early period we are dealing with, whenever the Supreme Court had to decide whether the supremacy of the federal government should be upheld, or the states allowed to exercise authority, the decision was that so long as the federal government did not act, the states should not be interfered with. Consequently, during this time the powers of the states grew and those of the federal government (what in India is called the Union Government, I believe) did not grow very appreciably. This is one reason that the statistics quoted above show federal expenditures in 1903 to be only 1.7 billion dollars compared with 100 billion dollars in 1964.

What caused this change of attitude with respect to the use of federal powers? The turning point was the war between the states, the Civil War, which took place between 1860 and 1863. This conflict was largely a war between the industrial north whose people had settled especially in New England and were now trading all over the world, and the agricultural south where the main interest was the growing of cotton and tobacco and there was little industry. When the industrial north won the war, the Republican party which was in control, continued to control the nation for some forty years without successful challenge.

The result was to promote the interests of industry and commerce at the expense of the agricultural south. Tariffs, for example, helped infant industries in the north and hurt world trade in cotton and tobacco. Thus for several decades after the Civil War, American industry expanded but at the expense of a heavy financial burden on agriculture.

Because of Republican political domination, the business community not only controlled the country but also the government, which allowed business a free hand and gave it active support. Indeed, during this period it was the government that was responsible for the development of business to an extent not appreciated even by most Americans. Professor Arthur Schlesinger notes that by 1863 more than half the railroad trackage in the southern states had been built with public money. He also notes

that in the 1840's and 1850's the state of Virginia, the oldest in the Union, owned more than half of the corporate enterprises within its borders.

Although the railroads began to develop as early as 1810-1820, they could not have expanded without public financial subsidies. This was equally true of many other undertakings, including canal systems and inland waterways. The federal government was exercising limited powers but it was extremely active in developing the national economy. Many people would prefer to believe that American economic development was due entirely to the efforts of the private sector but in fact there was a close relationship between the government and private industry, and without large contributions from government in most areas, development would not have occurred as rapidly as it did.

To keep the record straight it should also be remembered that this was a period in which foreign capital, largely from Britain but also from the continent, also contributed to American economic development. This must be said because it was not until after World War I that the United States was able to produce enough capital for its own needs, and much later than that before it could begin to export capital, which is the position today.

After the Civil War the situation changed very rapidly. The railroads expanded from one end of the continent to the other, much of its wild country with little or no habitation. From a business standpoint this might have seemed a foolish investment; it was possible only because the federal government contributed not only much of the money but also gave the land to a considerable distance on each side of the track.

Once transportation is available, people become interrested in developing communities, farms and industries, along the line because then they can ship their goods and produce to market. Over a period of time, therefore, the railroads became immensely wealthy as well as politically powerful, so much so that early in the 19th century their power was one of the main factors that led to the formation of the so-called progressive movement. Robert LaFollette, Hiram Johnson, William Borah, and others began to denounce the "malefactors of great wealth", with most of their animus directed against the railroads. Another result was the so-called Granger movement of small farmers, small artisans, and merchants. Centered largely in agriculture, it was a radical protest movement against the power of big business, including the bankers of the East, this being the older part of the country. The movement organized politically and was soon joined by a similar movement in organized labour.

Labour unions began to develop about 1820. Originally considered as illegal conspiracies, they were not granted legal recognition until about twenty years later, in 1840, and thereafter began to develop political influence. The American Federation of Labour under Samuel Gompers was established in the last quarter of the 19th century. At the same time, other large enterprises also were developing. The American Telephone and Telegraph Company, now the largest corporation in the world, was started during this time as a result of the patents being taken out in the telephone business.

It was the need for some kind of public regulation, especially of the railroads, that led to the passage of the Interstate Commerce Commission Act in 1887. This legislation is a landmark because it set a model for subsequent efforts at major regulation by the federal government. The law created a commission of 13 members, appointed by the President with the advice and consent of the Senate, to be responsible for regulating the rates, earnings, and service of the railroads in order to maintain an acceptable standard. As I shall show next week when I deal with the question of regulation, the commission form of regulation has become a distinctive aspect of administrative development in the United States. No other country uses the device to the same extent. Britain once did but abandoned it in favour of public corporations. In the United States, the regulatory

commission is a major factor in the development of the business-government relationship.

The second period of development, from 1887 to 1920, started with the second most important landmark in government's response to economic problems: the so-called Sherman Antitrust Act of 1890. This is a most interesting piece of legislation. Since coming to India I have seen discussions in the newspapers indicating that you also are considering the possibility of some such legislation.

The Sherman Antitrust Act starts with the sweeping statement that all conspiracies or restraints or monopolies that tend to interfere with trade, are illegal. It does not say some, it says all. Administrative machinery to enforce the act was created in the Department of Justice, although later additions to the authority were vested by the Federal Trade Commission Act of 1914 in a separate regulatory tribunal called the Federal Trade Commission. Thereafter the whole responsibility for policing competition, protecting the small businessman, securing ethics in business, avoiding unfair competition, became the responsibility of the federal government.

How did this happen? By the positive use of the commerce power contained in the federal Constitution. For a hundred years before this the commerce power had not been affirmatively invoked. Now, suddenly with these two major enactments, a sweeping change was under way.

The result was that because of the growing concentration of economic power (which incidentally began to affect labour as well as industry), within the next few years the federal government was transformed. It was a period of major regulation largely stimulated by the influence of the political progressives. The trend was forward. When people are hurt as a result of accidents in industry not due to their own negligence, it is society that should pay the cost; this realization led to the passage of the Workmen's Compensation Act. Government, it was then held, should protect women in industry because long hours and hard

work might eventually affect the health of the whole population. Government should also protect children because of a tendency in a rapidly industrializing nation to employ them also, at the expense of their health and education. Here again, it was believed that the government should regulate. Later there was a demand for minimum wages, and again Congress acted. People should not work for more than a certain number of hours, and Congress legislated on that subject as well.

Then there was the question of public utilities, including the communications industry, the power companies, and others. During the early period that I am speaking of, even water supply was privately owned, but by the turn of the century more water supply was municipally owned. Today, well over 90 per cent of all the water supply in the United States is owned and operated by the government. This in itself is a striking illustration of the transformation that was taking place.

Then in 1913 there occurred the first federal attempt since Lincoln's administration in 1863 to pass a major banking act. The Federal Reserve Act of 1913 is a landmark because now for the first time a federal law covered the whole banking system of the nation on the ground that the financial nerve centre of any country—whether it be capitalist or socialist—should come under some kind of central governmental control.

Finally, at the end of this period, in 1920 Congress passed the Federal Water Power Act placing any power developed in navigable waters under the jurisdiction of the federal government. When it came to a judicial test, the Supreme Court upheld this law on the ground that anything having to do with navigable waters is subject to Congressional control, and since small rivers contribute to large ones, the federal government has control over all water power.

Thus, already by 1920, large areas of the economy had been penetrated by the federal government for two main reasons. The first was the positive use made of the commerce and taxing powers. Congress regulated child labour, for example, by putting a heavier tax on goods made by child labour than on those that were not. The second reason was the fact that most of these new regulatory agencies were created outside the regular departments of government. Uptil the time of the Civil War, all the departments of the government were the so-called traditional ones: State (what you call External Affairs), War, Navy (they have now been combined), Post Office (the first big business to be operated by the government), and Justice.

After the Civil War, administrative agencies multiplied. First there was the Department of the Interior. The federal government owned most of the land in the area being developed by the railroads, and these had to be administered. Having been generous to the railroads, Congress was now prepared to be equally generous to education and determined as a matter of public policy to encourage education so as to reduce illiteracy. This required a great deal of money and to secure it, Congress passed the Morrill Act of 1890. Under this legislation, huge areas of public lands were sold in small lots to immigrants coming from Europe—as they did by 1907 at a rate of 3 million a year—and the proceeds assigned to education. Our state university system, which is government operated, was largely the result of the Morrill Act. Indeed, this legislation was one of the most significant developments in the whole relationship between government and the economy, for it is hard to imagine how the economic development of the country could have been accomplished except for these large draughts of money made available through the sale of public lands to finance public education.

In addition to the Department of the Interior, the Department of Agriculture also was created shortly after the Civil War and became one of the most important agencies in the whole economic development of the nation. Indeed, to the extent that the United States is successful in the field of agriculture it is largely due to the work of government in the field of agricultural research. The

point may be illustrated by a comment made by Mr. Khrushchev to a group of American governors whose trip to the USSR I helped to arrange in 1959 so that they might study Russian administration. We had a long interview with Mr. Khrushchev, in the course of which he remarked that there were two things for which the Russians were grateful to Americans. One was scientific management, which is your field, and the other was hybrid corn.

The Department of Commerce was not created until 1903 and is known as the businessman's department. For a long time business was opposed to having government enter this area, but by 1903 the plan was favoured. The department's jurisdiction included labour as well as industry, but ten years later, in 1913, the Department of Labour was created as a separate agency. Both of these departments were established to "foster and promote", to use the language of the statutes, the interests of commerce and labour, respectively; not merely to regulate them but also to help them.

In terms of major federal departments, that completes the list except for the Department of Health, Education and Welfare which did not come into existence until the Eisenhower administration, but as the result of pressures that had developed during the New Deal era.

Between 1920 and 1933 we had in office a series of Presidents who believed that government was interfering with the economy too much. Consequently many of the regulatory programmes previously emphasized were now soft pedalled. Business was not prosecuted for being monopolistic; instead, government substituted a system of conferring with industrial leaders in an attempt to get them to agree voluntarily to behave themselves. It was believed that to prosecute business might upset the stock market.

I would argue that this attitude on the part of government was one of the reasons for the great depression of the 1930's. The government failed to act at the right time, tensions and imbalances occurred, and culminated in the

depression. Agricultural prices, for example, had long been depressed, even prior to 1929 when the crash occurred, and when farmers cannot buy what industry manufactures, then industry also suffers. The difficulty spreads, pretty soon people are out of work and then they cannot buy from anybody, they cannot pay their taxes. The result in the 1930's was an increasing rate of bankruptcies. People lost their businesses and their lands. Finally in 1933 when Franklin D. Roosevelt came to office, many banks were closed and the nation was in a deep and serious depression.

The New Deal was created to deal with the situation and thereafter the functions of government expanded very rapidly indeed. So great was the demand that government was begging for trained public administrators to handle rapidly increasing functions, but for the most part they were lacking. For the federal government it was a major period for on-the-job training in public administration.

Consider all the areas that were entered by the federal government at this time, some of them for the first time on a large scale:

First, there was the whole field of the stock market and the sale of securities that had to be regulated. Then holding companies used for speculative purposes were prohibited. The banks were put under tighter control. Bank deposits were guaranteed up to 5 thousand dollars and later to 10 thousand dollars, so that if a bank failed no one would lose everything. Then the government went into the housing business including even the construction of houses as a means of providing work as well as dwellings. For the first time, the whole field of communications was regulated, including radio, telephone, and later, of course, television. The Tennessee Valley Authority was established as a broad, multi-purpose regional project overlapping several states. As one result, electricity in the public sector expanded from virtually nothing until today it accounts for about 20 per cent of the total. The National Resources Planning Board was set up in 1933 to plan the conservation and use of natural resources, public works, and similar

matters, constituting, however, only a limited approach to the problem of planning.

The greatest expansion of all occurred in the welfare field. Historically, welfare had been the responsibility either of the family, of the local community, or of some voluntary charitable agency, but the depression created problems too great to be handled by these limited means. Vast federal relief programmes were finally superseded by the social security programme, created in 1935. Since then, employees and employers have both contributed, for two purposes: for retirement benefits from a fund that is invested; and for unemployment insurance which provides temporary assistance in case of need. The third major part of this complex is public assistance.

To this nucleus was later added a whole series of other welfare activities. Indeed, after this New Deal period, the whole field of welfare became one of the largest activities of the government so that now, programmes affecting health, education, and welfare have been drawn together into a single department—as already noted—which is one of the largest in the federal government.

Since this last department was created in 1953, the continued growth of the federal government has taken place largely through ad hoc agencies. A major expansion was in the field of atomic energy under the Atomic Energy Commission. No doubt for security reasons, this agency was treated differently from those in other areas; thus for the first time there is a Joint Congressional Committee of the House and the Senate that is responsible for the commission's activities. Billions of dollars—I hesitate to say how many but I think it is 14 or 15 billion dollars—have already been spent on atomic energy.

When the space exploration programme came along, again there was need for a separate agency. At the same time the United States became increasingly involved in overseas activities, with the result that since 1946 there has been spent somewhere between 3 to 5 billion dollars

a year on foreign aid programmes. The question then arose, should this activity be placed in a separate agency or should it be attached to the State Department? Both alternatives have been tried and the question is not yet settled.

As a result of all these trends and needs and new developments, not only has government expanded its responsibilities so that today no area in the economy is exempt from government's attention, but also there has been an enormous proliferation of administrative agencies, a majority of which are charged with a responsibility in the economic area. This is one reason that I have argued so fervently for greater economic statesmanship on the part of our public administrators. Nor is it only in the United States that the need appears for, it is felt in every nation today. Government's expansion has an increasing economic importance everywhere. Consequently we need not have merely administrators but political economists, men and women who have acquired economic wisdom understand the relation between economics and politics.

There is also the problem of how to rationalize, how to organize the government in such a way that this great accumulation of agencies can be managed effectively. In the United States there is the greatest variety of governmental administrative agencies to be found anywhere in the world. Not only are there the major departments that I have referred to—like Defence and Commerce and Labour and Welfare—but we also have almost a dozen major regulatory commissions dealing with areas like utilities and also with areas unlike utilities, such as labour relations and the control of ocean shipping.

In addition, there are many public corporations. At the end of World War II, I was employed by the Comptroller General to make a survey of public corporations and to advise him on how to audit them. We found 101 of these agencies. To give you some idea of their magnitude, during the war some of them had spent as much as 11 billion dollars building the newest and most modern industrial

plant in the country. The number has since been reduced, but considering the Tennessee Valley Authority, the Farm Credit Administration, and many others that are still in existence, there is an enormous administrative problem in how to tie them into the economy and into the central federal administrative structure.

So, in conclusion, when one considers public programmes in terms not only of policy but also of organisation, how can one escape thinking in terms of the structure of the economy? My contention is that the most effective way to organize is in relation to the main segments of the economy; that every major programme of government having economic aspects should be related to some area of the economy so as to be able to measure its consequences. Banks that serve agriculture and provide credit for farmers, for example, do not belong in the Department of Commerce, which is the businessman's agency. Rather, such banks belong in the Department of Agriculture. I believe this policy should be followed consistently with regard to all the major programmes of government.

At our next session I propose to deal with one of these main problem areas—the field of major regulation—because it is a development more distinctive in the United States than in any other country. In addition, I have been told that you in India have a growing interest in this subject because, as I understand it, not only is there an interest in public enterprise but also in matters concerning the concentration of economic power, major regulation, antitrust, and the like. It is possible, therefore, that some of this discussion may be relevant to the situation in this country.

ORGANIZING FOR REGULATION

Last week, in dealing with the major stages of economic and administrative growth in the United States, which I called a case study, I remarked that one of the distinctive features of American development is the extent to which we have relied on major regulation. I propose to deal with that subject today under the heading of organizing for regulation. From reading the newspapers in India I gather that there is some interest in this subject here also.

Major regulation is one of the six main administrative responses to economic and social growth. Although I do not propose to discuss all of these responses today, I shall at least enumerate them in order to put major regulation in its proper perspective.

The first response is for government itself to undertake the administration of certain programmes, including many of a business or economic nature that are needed at particular stages of growth. Such programmes may be administered through a regular department of the government, through a government corporation, or through a mixed enterprise in which both government and the private sector share. In India, perhaps the principal part of the whole response of the government so far has been the outright operation of programmes needed in a developing economy.

The second major response is regulation, which may be of a major or a minor character. From the organizational standpoint, regulation may be through a regular department of the government or through an *ad hoc* body called a board or a commission.

The third administrative response is licensing and franchise. If the government does not want to undertake a programme of its own, it may grant the legal privilege, the franchise, to some other undertaking, usually a private one. In the case of licensing, instead of continuous regulation there is are view at the time of the periodic renewal of the licence, in order to maintain certain standards which the undertaking is required to observe.

The fourth response is the contract device, meaning a contract between the government and a private business enterprise. I do not know that this device is very widely used in India. In the United States it had not appeared to any great extent until World War II, but during and since that period it has become one of the principal administrative responses to the demands of economic and social growth.

The contract device may be used for many purposes. In the fields of atomic energy and space exploration, for example, a government contract with a private corporation may amount to hundreds of millions or even billions of dollars, the reason being that only a few companies are equipped to enter into such agreements. There are contracts for space exploration, moon rockets, missiles and the like. To go from the sublime to the ridiculous, Congress even permits the making of a contract with a professor to give a lecture. In this event the contract is the means of getting around personnel regulations which prohibit the government from paying as much in the way of fees to professors as they deserve. So the contract basis is a very flexible one and is sometimes considered a substitute for the public corporation.

The fifth response occurs when the government does not wish to undertake a programme of its own but when encouragement is needed in the form of financial assistance or a subsidy. This has become a major activity in the United States where we have government agencies—some of which are the largest in the country—that occupy this field. For example, the Commodity Credit Corporation

buys and stores the principal grains in order to take them off the market and maintain a particular price level; the same agency must then see that these grains are properly stored—which often means building vast new facilities—and eventually sold outside of the country.

Finally, the sixth means by which government responds administratively to the stages of growth is, of course, by overall planning, or at least by degrees of planning, and by assigning roles not only to governmental agencies but to voluntary agencies as well.

Of these six devices, the ones most commonly used are the first and second, that is, outright administration, and regulation. Today I shall deal with regulation because in the case of most developing countries it is a subject that has received much less consideration than it seems to deserve.

There is no one method by which government can respond to every aspect of economic growth, but there are certain basic circumstances under which regulation is indicated. It can be argued that government should administer everything, but pretty soon there arises a conflict between the desire of government to administer and the availability of managerial ability to do the job effectively. This happened in the USSR which in 1958 found it necessary to decentralize 160 major political departments and industries, all of which were at that time controlled from Moscow. It was just humanly impossible to operate that much public business from the centre. Consequently in 1958 it was decided to keep in Moscow only 16 of these departments—relating for the most part of external affairs and defence—and to turn the others over to the 15 republics. This reduced the load of the central government to a point where it became manageable.

Most of the discussion of the alternatives of outright management as against regulation revolves around the issue of capitalism versus socialism. There are also practical considerations, one of them being that if government is required to assume a great many functions, frequently it can do a better job by the use of a variety of methods—that is, all six of the devices mentioned earlier—than if it must rely upon one method exclusively.

The second factor entering into any consideration of this matter is that private enterprise enjoys a certain advantage over public management, especially in fields where consumer taste, response to markets, and the desirability of competition are important factors. Especially luxury items, such as clothing and cosmetics and house furnishings, are best produced by business management under competition, than by government. Generally speaking, government operates best in the area of undertakings that are basic, big, and standardized. The further one gets from these basic categories, the more likely it is that private enterprise will secure a more progressive management and will turn out a higher quality product. In such cases, if the particular undertaking is to remain in private hands, it is better to provide the necessary standards, rules and policies by means of regulation rather than by outright public ownership and management.

There are certain areas where regulation is desirable at all stages of economic growth. In a rapidly developing country, regulation reduces the total load of the government and, if it is successful, forces others also to serve the public welfare and the public interest.

Regulation may be either major or minor in nature. Minor regulation is found in every country and relates to such matters as the maintenance of sanitation, health measures, water supply, the licensing of certain occupations where health is a factor such as food handling and barbering, plus certain professions such as medicine, dentistry, and the like. This type of regulation covers nearly every area of life and generally speaking, is accomplished at the state or municipal level.

By contrast, major regulation is commonly—although not invariably—undertaken by the central government. In the United States, however, where federalism is emphasized, both federal and state agencies operate in all the major fields of regulation and hence there are two sets of officials, which creates something of an administrative problem. Such agencies deal with the regulation of telephones, telegraphs, television, radio, the production of petroleum and natural gas, rail and bus transportation, insurance, banking, and the like. Every one of the fifty states has a regulatory commission of some kind and some of them are even older than the first federal body, the Interstate Commerce Commission which was created in 1887.

Thus, although major regulation is primarily the responsibility of the central government, in the United States that responsibility is co-ordinate with the states. I propose, however, to deal with the problem from the standpoint of the central government.

The first requirement is to relate this administrative regulatory responsibility to the stages of growth already differentiated. In the United States there have been two principal periods in which the growth of major regulation has occurred. The first was from 1887 to 1920, and the second was during the depression of the 1930's.

During the first period the Interstate Commerce Commission was created in 1887 and now deals with all forms of transportation except ocean shipping and aviation, which are handled separately. The Antitrust Division of the Justice Department was set up in 1890 to administer the Sherman Antitrust Act of that year. The Federal Trade Commission, established in 1914, is responsible for the whole problem of competition and also monopoly, sharing in some degree in the jurisdiction of the Antitrust Division.

The Federal Reserve system, created in 1913, operates through a Board of Governors and has some regulatory powers over the banking system, as has the Controller of the Currency. The U.S. Tariff Commission was created in 1916. And finally, in 1920 the Federal Power Commission came into being with jurisdiction over water power, electrical power, natural gas and pipelines.

There followed a ten-year interval during which the federal government virtually withdrew from the field of major regulation relative to big business. But then as a result of the great depression that started in 1929, from 1932 to 1945 there occurred the second period of expansion which, in terms of new fields entered and the importance of regulation as an administrative device, is comparable to the earlier period.

In the 1930's, the Federal Communications Commission was created, as already noted, to regulate all forms of communication from telephones to television. The national Labour Relations Board was set up to handle disputes regarding the accreditation of labour unions. The Securities and Exchange Commission took over the field of stock markets and investments. The Civil Aeronautics Board was made responsible for civil aviation regulation. The U.S. Maritime Commission (now the Federal Maritime Board) was charged with the control of ocean shipping. And the Food and Drug Administration was created out of a former agency with few powers, to check on the purity of food and drug products.

When one considers the five basic categories into which the structure of the economy may be divided, it will be seen that regulation occurs in three of them: in public utilities, industrial development, and welfare (food and drug).

In the United States, the ten or twelve major regulatory agencies of the federal government may be subdivided into four main categories. The first has to do with the policing of competition and the control of monopoly. Here the agencies are the Federal Trade Commission, the U.S. Tariff Commission, and the Antitrust Division of the Department of Justice. The reason for including the Tariff Commission is that tariff policy has much to do with monopoly and competition, not only on a world basis but also within a country.

A second category is public utilities which may be still further subdivided into transportation, power, communications, and atomic energy. The largest number of major

regulatory agencies comes under this heading and includes the Interstate Commerce Commission, the Civil Aeronautics Board, the Federal Maritime Board, the Federal Power Commission, the Federal Communications Commission, and the Atomic Energy Commission.

The third category is finance and includes two major agencies: the Federal Reserve system and—by far the most important—the Securities and Exchange Commission. The fourth category may be called labour and welfare and includes the National Labour Relations Board and the Food and Drug Administration.

The principal argument in favour of major regulation is that one can accomplish the same results as under government ownership without the complication of having the government attempt to do so much that it does nothing well. A main argument in favour of government corporations, as I shall point out in later lecture, is that the policies and the limitations of the undertaking are written into its charter. The amount of money to be invested, the profit to be returned, the costs to be allowed, and the kind and standard of service to be provided are all set forth. These are basic factors in the use of the public corporation and they are equally possible of achievement through the use of major regulation.

To illustrate, let us take the case of the oldest and largest federal regulatory body, the Interstate Commerce Commission. This agency, composed of eleven commissioners, deals with the whole of transportation except aviation and ocean shipping. The jurisdiction includes railroads, buses, trucks, and inland waterways (which in the United States are extensive). The basic law of 1887 has been amended perhaps a dozen times but the commission's functions can be stated rather simply: it deals with services, earnings, and the expansion or discontinuance of services. The basic fact is that nobody can operate in this field without a franchise establishing the right of the government to impose these other restrictions.

The underlying concept of a public utility is that such an undertaking always has a public use, is related to the public interest, and hence must be available to everybody without The idea came partly from the English discrimination. common law regarding inns: these were to be open to all comers and hence government assumed the responsibility for providing the kind of services they should offer and the charges they should make. Later the same idea attached to transportation which is the principal means by which the idea of regulation has expanded in modern times. The argument is that in return for the privilege of an exclusive franchise, the proprietors must offer the public an acceptable level of service as defined by law and administrative orders. In the case of the Interstate Commerce Commission this means that it may determine whether the rolling stock used by the railroads for passenger traffic is satisfactory, whether safety appliances are adequate, whether the public is protected from the standpoint of convenience and necessity, whether the frequency of service is sufficient, and similar matters, all of which concern the service that is offered.

The second area under ICC regulation has to do with railroad finance. It must first be determined how much money is invested in a particular railroad operation so that the rate of return to which it is entitled may be arrived at and the so-called rate base established. The rate base is the figure on which a return must be earned. The final determination is whether the rate of return is fair.

The matter of a fair return has been one of the most controversial issues in the whole field of utility regulation, the reason being that the Supreme Court of the United States, which in case of controversy makes the final decision in this area, has been confronted with a number of conflicting doctrines. One theory would allow earned profits on any amount of money, that is, historically verified in the company's books; this is called the doctrine of historical cost. Another doctrine would allow earned profits on the reproduction cost of the operation, that is, the cost of reproducing the property today as contrasted with the original

cost. Since prices generally tend to rise, this formula offers a considerable financial advantage to investors. A third theory, championed by Mr. Justice Brandeis and called prudent investment, would allow earned profits on the amount of money that a prudent, capable businessman would invest in a similar enterprise.

At present the Supreme Court holds that fair return is largely a technical judgment to be determined by the regulatory commissions after all of these three doctrines have been taken into account. The commissions are assumed to have professional expertise and hence, generally speaking, the courts will not interfere with their decisions.

Nevertheless, the question remains as to what rate of return is justified. Over a period of time the courts have gone into this question and have usually concluded that in the case of a regulated monopoly such as a public utility, where risk is minimal but a reasonable rate of return is required as an incentive to produce a high standard of service at a reasonable cost and still make a profit, the rate of return should be around 6 per cent. As a result of this, stocks in these regulated undertakings have become highly desirable investments. If at any time the government were to fix a rate of return so low as to be confiscatory, then management simply offers proof to the courts and the commission is ordered to revise the rate upwards.

The third large area of a commission's work has to do with adequacy of service, extensions of service, and discontinuances. The matter is important because the tendency of a business operated on the basis of a franchise is to produce only so much service as is profitable and hence it tries to avoid areas that are sparsely populated. Suppose, for example, that a franchise is granted to provide a bus service, the city is growing in a certain direction, and new suburbs are being built. A company might be reluctant to extend a line to that area until more people had settled there, but in terms of public convenience the community will not grow until a bus line offers some public transportation. So, there must be a compromise somewhere.

Again, electrical utilities, which constitute one of the main regulated groups, were once loath to extend their lines to rural areas where population was sparse. So in the 1930's Congress passed the Rural Electrification Act which authorized the federal government to license cooperatives to build their own power lines and supply their own electricity. This is now a big programme. And then because telephone companies also avoided these rural areas, Congress increased the authority of the Rural Electrification Administration to build telephone lines and provide this kind of Parenthetically, one consequence of these service also. programmes was to cause the regulated industries to become apprehensive about the possibility of expropriation—that is, socialism—with the result that they tried harder to expand and improve their services in rural areas.

Some of the hardest questions of regulation have to do with the reduction of a service that no longer pays. Here, for example, is a railroad that on its main line earns a great deal of money. There is concentration of use, operation at nearly full capacity, utilization of all facilities, and the business earns a profit. But on its branch line the company loses money because its facilities are less used and it cannot charge enough to make the operation profitable. Beyond a certain fare, people use other means of transportationbuses, car pools, and the like. Consequently, regulated undertakings argue that they should be permitted to discontinue the unprofitable portion of their service. All over the United States during the last thirty years, hundreds of miles of railroad service have been discontinued because the Interstate Commerce Commission has granted the necessary permission. The same thing is happening in Great Britain where the railroads have been nationalized and the maintenance of an unprofitable service constitutes an intolerable burden on the tax payers.

In the foregoing illustrations I have used transportation as the example, but the same considerations apply in all other major fields of regulation having to do with public utilities. There are, of course, some differences. In communications, for example, the Federal Communications Commission, consisting of five members, grants franchises, determines adequacy of service, and deals with the earnings and finances of communications companies. But the communications industry, especially radio and television, differs from transportation in that it influences peoples' minds.

In most countries, communications is a government responsibility, but in the United States it is governmental only to the extent that the government regulates it. In Great Britain both radio and television are a constitutional monopoly and belong to the Post Office, and it took special legislation before private interests were permitted to develop television channels and programmes in competition with the BBC.

The regulation of communications raises some difficult questions. For example, there is a tendency for the number of newspapers to diminish and to come under common ownerships so that a few big chains increasingly control most of the important newspapers. In addition, the principal demand for the purchase of radio and television stations comes from these same newspaper chains. Because radio and television are becoming substitutes for the reading of newspapers, an over-concentration in the whole field of communications increases the possibility of certain undesirable developments: news may be withheld or distorted, editorial views appear in the news columns, there may be an attempt to manipulate public opinion, to indoctrinate the public. Healthy disagreements and discussions disappear when various newspapers, radio, and television channels having different viewpoints depending upon the political party or political orientation they favour, are consolidated under a few large ownerships.

This limiting of discussion is a serious disadvantage to a democracy which depends on the expression of all points of view through the widest possible use of all the media of communication. In the United States this freedom of discussion is becoming a serious issue because Congress permits the owners of newspapers to acquire radio and television stations as well, the only restriction being on the number of facilities—I think it is six—that may be accumulated under one ownership. These six, however, may be important ones covering a wide area. When newspaper control is added to radio and television control, a new dimension is added to the problem of regulation.

The alternative to regulation, of course, is for the government itself to own and operate these communication facilities. Here the same difficulties arise regarding the restriction of public discussion, perhaps to an even greater extent than under private ownership—unless, of course, the point of development is reached, as in Britain, where the government has the wisdom, in the use of communications facilities, to present viewpoints other than their own.

In order to draw a balanced conclusion with regard to major regulation, the principal adverse criticisms must also be considered. The greatest objection is that major regulation creates powerful interests which may wish to exert great influence upon the government and possibly even corrupt it. One of these industries alone, the American telephone industry, is worth 30 billion dollars. Another, the electrical utilities industry, is worth 20 billion dollars. These are astronomical figures and the temptation is to use this kind of economic power for the purpose of influencing public policy. Appointments to regulatory commissions, anywhere from three to eleven men, are important to the industry in question which naturally tries to secure members who are favourable to its interests.

In fact, of course, the role of commissioner is supposed to be that of impartial umpire protecting the public interest and hence they must be free of improper pressure. Consequently, the future of regulation depends upon whether the industry being regulated is sufficiently far-sighted and public-spirited to live by the rules of the game. If the public ever discovers that those who are supposed to be impartial have become dominated by the interests they are supposed to control, this is likely to be the end of regulation and the beginning of public ownership.

The second adverse criticism of major regulation is that it complicates the whole organization and symmetry of government administration. This is especially true in nations which, like India, have a responsible form of government in which every programme must be related to a central organism headed by the Prime Minister. In the United States our federal regulatory agencies are large, hire many thousands of employees, spend millions of dollars a year, and constitute what we call the headless fourth branch of government because they are neither wholly within the administrative branch nor wholly outside of it as would be the case if they were responsible only to Congress.

In theory, these agencies are called autonomous and held to be self-contained. The subject is interestingly dealt with in a book by Professor Arthur Macmahon called Delegation and Autonomy, a series of lectures he gave at this institution. In Chapter IX he deals with the question of autonomy holding that regulation should be divorced from politics and that a commission detached from the regular administrative organisation of the government is most likely to be independent. Certain other measures also promote this objective. Thus, commission members have staggered terms so that not all of them are replaced at the same time; and membership is bipartisan in that on a seven-member board, for example, four belong to one political party and three to the other.

The problem is that regulatory commissions are virtually independent not only of political parties but also of the President. President Franklin D. Roosevelt, for example, was unhappy about some of these regulatory bodies and tried to replace some of their members, whereupon the Supreme Court nullified the action on the ground that the commissions are quasi-legislative bodies and their members are protected by Congress. Consequently if the President and the commissioners hold different views, the President is powerless to change the situation until a vacancy occurs.

It has been proposed to solve this problem by attaching the regulatory bodies to one or another of the major

executive departments. Thus, the Federal Trade Commission might be attached to the Department of Justice; the Federal Communications Commission, the Civil Aeronautics Board, and the Interstate Commerce Commission to the Department of Commerce; the National Labour Relations Board to the Department of Labour; and the Federal Power Commission to the Department of the interior which is concerned with natural resources and similar matters. By such means the commissions might be integrated with the rest of the executive branch.

Alternatively, it has been proposed that this fourth branch of government—the regulatory agencies—should have a common head, one person to supervise all of them. This sounds like a tidy arrangement but in fact it would be a little like mixing nuts, bananas, and apples, which have little in common except that they are all called fruit. There is a world of difference between the regulation of labour relations and of public utilities, for example.

It can also be argued that in judging the effect of policy, an administrative agency should be related to the area of the economy to which it is by nature attached. How, for instance, can it be determined whether the Interstate Commerce Commission is doing an effective job without a look at the whole field of transportation? How can the quality of labour relations be determined unless the National Labour Relations Board is seen as part of the whole area of labour? It seems doubtful, therefore, whether any proposal to bring the regulatory bodies together in one place under the supervision of a single head has much chance of adoption.

A third adverse criticism of regulation is a tendency for these agencies to emphasize policing and control at the expense of constructive development. A third proposal, therefore, is to curtail the regulatory function and transfer all functions relating to policy, planning, improved services, coordination, and assistance to a regular executive department or bureau. In the field of transportation it has even been proposed to create a new Federal Department of Transportation on the ground that the problems of this

industry are so acute—partly because of the growth of great metropolitan areas—that only a planning agency like that of a major administrative department can possibly solve them. It has also been proposed to merge some of the many independent railroad lines on a regional basis in order to prevent bankruptcies, and it is argued that the best means to this end is a Department of Transportation capable of planning the whole transportation structure. Because the main emphasis of the Interstate Commerce Commission is on control, on preventing the industry from doing the wrong things, it is not likely to be able to undertake planning and encouragement on the broad scale that is needed.

Some of the problems of regulation are such that only a positive approach is likely to solve them. Regulation is a useful device for preventing business enterprises from doing the wrong things, but it is doubtful whether it is equally useful in getting them to do the right things. Eventually, therefore, the deciding functions, the quasi-judicial functions of regulation may have to be detached from the quasi-legislative functions so as to promote the industry in question. As early as 1937 this policy was offered by the so-called Brownlow Committee on the re-organization of the federal government but the opposition of strong interests has prevented its adoption.

Something should now be said about the training of commissioners to deal with major regulation. If a nation is to use major regulation along with the other methods of responding to the demands of economic growth, then specially trained people are needed. In the United States, some great men have operated in this field, including Joseph B. Eastman who was chairman of the Interstate Commerce Commission for many years and wrote at least two books on the subject.

Generally speaking, these people must be trained not in one field but in several, which is a main reason that it is so hard to produce them. In the area of transportation, for example, a man must know something about engineering and transportation technology, and also something about economics, at least from the standpoint of finance. He must also know something about business services and about law, at least in relation to the powers of the regulatory body he serves. He must also know something about government and public administration. It is not easy to secure all of this training in so many different fields. Nevertheless it can be done and the result is outstanding administrators in the regulatory field.

In conclusion, I believe that in economic development there are certain areas where regulation is a better response than any of the other five. One of these areas is policing the economy in order to promote competition and avoid monopoly, a problem that appears in every country not under a complete dictatorship. As Adam Smith remarked, it is in the nature of businessmen to conspire, and hence the regulation of competition is unavoidable if competition is to be maintained.

I also suggest that the degree of regulation needed at a given time depends largely upon how much government is trying to do and the availability of trained manpower for the job. If there is not enough trained managerial personnel to undertake the outright operation of economic enterprises, then the sensible alternative is to train people for the less demanding job of major regulation.

My own belief is that the future belongs to a mixed economy consisting of both public and private enterprise, of both public ownership and regulated private enterprise. I also believe that although there may be a tendency in many countries to minimize the importance of regulation, in the long run it will be found to be an essential tool of economic development.

MANAGING STATE ENTERPRISES

The problem of managing state enterprises grows out of last week's discussion of major regulation and leads into the one for next week, which is planning. Last week I said that of the six methods by which government may respond to economic change, the first two are major regulation and the direct administration of programmes by the government itself. These are by far the most common. Today we shall deal with the area of direct administration.

A government economic enterprise may be administered by a regular department, by a public corporation, or by a mixed enterprise. Since most mixed enterprises are corporate in form, this device is really a subdivision under the second heading. Today's discussion will relate primarily to the corporate (including the mixed enterprise) device, partly because it is widely used in India and partly for the personal reason that the public corporation is among my earliest and most sustained interests in the field of government administration.

Last week's discussion of major regulation touched on only three of the five main segments of the economy: public utilities, industry, and to some extent, welfare. Today's discussion concerns the first two of these plus agriculture. In the United States, examples of economic enterprise in agriculture are the Commodity Credit Corporation which deals in surplus farm products, and the Farm Credit administration which is banker to the farmer. The areas of welfare and the field of training and institutional development are not very much affected by the subject of today's lecture.

Government corporations may be dealt with in two steps. The first relates to the first three periods in economic

development: the traditional, the pre-conditions, and the take-off. The second relates to the two later stages: the mature, and the mass-production or affluent society.

Many books have been written on public enterprise but most of them are from the standpoint of administration and, so far as I know, the stages-of-growth aspect of the subject has not yet been dealt with. (Parenthetically—and it is an important parenthesis—my impression is that during the last fifteen years there has been a greater volume and a higher quality of scholarship on the public corporation in India than in any other country. One of the best of its kind, for example, is the study of Efficiency of Public, Enterprise in which one of your professors, Professor Paranjape, participated. During the last few years in the United States there has been a considerable neglect of the field of state enterprise, which is unfortunate because the issue there is by no means a dead one.)

Instead of dealing with the management side of public enterprise, therefore, let us organize our material around the theme of stages of administrative growth so as to bring out certain policy considerations that appear to be significant. By means of this analysis we shall try to get some perspective that throws light on policy. We shall leave aside the usual questions relating to the advantages of the corporate device as against departmental administration, and the problem of parliamentary control. As important as these issues are, we shall deal with them only indirectly in relation to the stages of administrative growth as a response to the stages of economic growth.

During the stages preceding maturity, some of the motives for choosing particular instruments for the management of stage enterprises seem to be these:

First, a regular department of the government will be used if it is charged with a constitutional responsibility for undertaking a particular service. When, for example, there is already a state monopoly as in the case of the Post Office, then the Post Office Department will normally

assume responsibility for radio and television as well, although it may license some other body to do the actual work. In these first three stages of growth, the departmental type of organization will also be chosen if it is expected that the enterprise is to become a permanent one.

During this same pre-maturity period, the mixed enterprise, one in which both public and private funds join in a common effort, will sometimes be used as the means of attracting private capital. This is a major consideration during early development because the principal limiting factor is the securing of enough capital so that the economic multiplier can go to work. The primary need is to attract capital from the nation's own investors in order to avoid the common danger of fugitive capital when attractive opportunities at home are lacking. But in addition, it is desirable to secure foreign capital as well. In the circumstances, the need is for proper controls because as a matter of high policy, most developing countries are loath—whether rightly or wrongly—to avail themselves of large quantities of foreign capital. Having so recently secured their political independence, they are suspicious of whatever appears to invite controls from the outside. The mixed enterprise is a means of adding a measure of control from the domestic side.

As a practical matter, there is much to be said for the mixed enterprise. It takes some time for a country to develop enough domestic capital to be wholly independent of outside sources, I referred earlier, for example, to the fact that all through the 19th century, the United States was dependent primarily upon British and European sources for capital because we did not have enough of our own. In perspective, it would seem that we did the right thing even without the benefit of the mixed-enterprise device, because investment from abroad certainly accelerated the rate of our economic growth.

Today, a convincing case can be made for the use of the mixed-enterprise device in Latin America. Brazil, for example, is an enormous country with great natural resources, most of which have never been explored; unfortunately,

the nation is short of managerial talent. Consequently, along with other Latin American countries, Brazil is developing mixed enterprises in which foreign capital and management join with local capital and management in undertakings that are necessary to the economic development of the nation. An important related issue is whether this arrangement offers a training ground for managers, so that eventually the enterprise can be wholly domestically owned and managed. The incentive and the bargaining position are much greater in the case of a mixed enterprise than in the case of a privately owned corporation financed by outside capital alone.

For a long time, for example, American oil companies operating in Latin America assumed that the local management of these companies would have to be entirely by Americans. Gradually a demand grew for the training of the nationals of the country involved, and the oil companies began to realize that if they ignored this demand, they might lose the concessions they enjoyed. So they began to train local people. In the case of a mixed enterprise, such training will occur much sooner, especially if the host country controls a majority of the stock in the investment. Such a training function is a first step in making the enterprise wholly owned within host country.

In the various discussions of state enterprises, there would seem to be too little consideration of this device as a transitional step in the growth of a developing economy. There is so much argument about ideology, about socialism versus capitalism, that the wider implications of a mixed enterprise are overlooked. In a long-range strategy to attract large amounts of both capital and management, there is much to be said for the mixed enterprise as a temporarily useful device at a particular stage of development.

Just prior to World War II, the mixed enterprise was widely used in Europe. Almost every kind of undertaking, especially in Germany, was owned and managed by a mixed enterprise. Not merely utilities, but also such businesses as garages, bakeries, and laundries were owned and managed

in this way as the best means of securing capital. In addition, the mixed enterprise was also the means of extending the area in which the government would eventually become the manager of economic enterprises, and it was also the means of invading new areas of the economy.

Since that time, however, the mixed enterprise in Europe has not been so widely favoured. One reason is the fact that one of Hitler's first moves was to convert all mixed enterprises into outright governmental enterprises so as to consolidate the power of the Nazi party. In addition, although the laws relating to the mixed enterprise guaranteed 51 per cent of the financial control and a majority of the management team to the government, it was felt that the government did not have a sufficiently free hand, and a desire for the complete control of ownership and management began to be felt.

Thus in Europe, where the mixed enterprise was most widely used between 1900 and about 1939, today it has lost popularity. This does not, of course, weaken the argument with regard to the use of the device at a particular stage of growth. As a temporary instrument keyed to a paticular stage of development, it is useful. Eventually, it will generally be superseded by something else.

The government corporation has a different justification during the first three periods of development. The principal one is to secure the advantages of private management. Historically, the public corporation is an autonomous subsidiary of the state enjoying a greater degree of managerial freedom than the state itself can hope to achieve except under an authoritarian regime. There is much historical evidence to support the assumption that the corporation encourages efficiency and enterprise. And the history of the corporation goes back a long way—I have read, for example, that in India the device was already used in the sixth century. I do not know enough about Indian history to know whether the device was employed even before that time, but it was in use at that early date.

In the western world the corporation was an invention of the Romans. The word "corporation" comes from the Latin word meaning association. Later, during the Middle Ages, the craft guilds became corporations as the means of conveying an inner integrity, an autonomy, a separateness. Members of the guild could do things in their own way. Since that time, the corporation has been used for a variety of purposes, including even some of the functions of municipal government. In addition, both in Europe and in the United States, most municipal governments are themselves corporations.

Historically, corporations were also used as instruments of royal power. For hundred of years, dating from the end of the 15th century, rulers in Austria and Germany created corporations, especially to encourage mining and the colonial trade. Until roughly the beginning of the 19th century the corporation was almost exclusively a privilege granted by royal power to merchant adventurers, conveying the mandate and the freedom to pursue an enterprise which either directly or indirectly would increase the royal power. In the early part of the 19th century the passage of general incorporation laws made the corporation the most important institution in industrial enterprise. The best discussion of this development is a book by Adolf Berle, Jr., and Gardiner C. Means, The Modern Corporation and Private Property.

What general incorporation laws did, in effect, was to guarantee to incorporators the managerial freedom with which to produce the best results of which they were capable. By contrast, government management operates within a large framework in which, because of its size and complexity, centralized controls are essential, or at least are thought to be essential. These centralized controls are exercised through budget regulations, legislative appropriations, the centralized auditing of accounts, centralized personnel requirements, centralized purchasing, and generally speaking, a limitation upon advertising and public relations on the ground that if regular governmental

departments advertise themselves, it might be the means of extending their jurisdiction.

In England this cautious attitude toward public relations went so far that even as late as 1932, when I wrote my study of British Public Utilities and National Development, the British Post Office Department, which operates the telephone system—at present the largest business in the country —was not permitted by the Chancellor of the Exchequer to spend anything in order to promote the use of the telephone service. In 1932 that policy was changed and almost overnight the telephone service became the largest advertiser in the country. Immediately there was a big increase in the number of installations, in the number of telephone calls, and consequently, of course, in profits to the Post Office. One reason for the altered policy was a need for the earnings from the telephone service to finance other governmental programmes. With these advantages to be gained there was a willingness to change the historic policy of not allowing a public programme to advertise.

In addition to the historical factors that we have dealt with here, there is the factor of entrepreneurship that also is extremely important. Indeed, some economists regard entrepreneurship as the most significant factor in economics, a point of view that is well expressed, for example, Joseph Schumpeter's Socialism, Capitalism and Democracy. The author stresses the history of entrepreneurship from the earliest times down to the period in which he wrote and raises the question: Is it possible under socialism to assure the development of entrepreneurship? Or socialism kill entrepreneurship? Entrepreneurship simply means individuals who have great drive, who are innovators, and who at the same time are so practical and have such organizing and managerial ability that they can make money. Such people must be managers, they must have energy, they must be flexible, and they must be resourceful.

If one can avoid ideological bias and remember the historical background, it will have to be agreed, I think,

that factors such as the bigness of government and the tendency towards standardization and strong centralised controls make entrepreneurship very difficult in a governmental setting. Under these circumstances, the government corporation conveys a degree of freedom to management to change policy when change is needed, to use ingenuity, to behave almost as free agents in a private setting.

Thus, it may be concluded that a principal justification for the use of the public corporation during the early periods of economic growth is to recruit the best private management that is available for certain enterprises. In the face of a strong ideological objection to private enterprise, this is not likely to occur. If, on the other hand, people are more strategically minded, they will appreciate that the talents of private managers who are highly successful in making money can well be utilized in public enterprises in order to achieve for the larger public, what they have been able to achieve for their own corporations.

Generally speaking, the private manager emphasizes sales, the wishes of the consumer, the making of profits. The government corporation can develop these same motives, despite the difficulty that the historic or traditional functions of government do not emphasize them. To go back to the illustration of the British Post Office, when the Chancellor of the Exchequer decided as a matter of policy that the telephone service would not be permitted to advertise, the reason he gave was that governmental services are merely supplied, people may either use or reject them as they wish, but they should not be encouraged to use them. This is doubtless a valid public policy with regard to the traditional functions of government but it surely does not apply to something sold over the counter, or on a metered basis, or in the same manner as a similar service in private enterprise. Actually there is little difference between the sale of a telephone call and the sale of a garment; in both cases the emphasis is on sales and is needed if the enterprise is to succeed.

Let us move now to the period that we have called the fourth and fifth stages of development, where some new variables appear. One of these is the frequent use of the public corporation for emergency purposes—not for sales or for private purposes at all. The principal extensions of public corporations in the United States occurred during two emergency periods: during the depression years of the 1930's, and after 1941 during World War II. In both cases the common factor was an emergency. During the war, for example, the federal government created corporations in a vast holding company set-up. The top of the pyramid was the Reconstruction Finance Corporation which, with the aid of six subsidiary corporations, built all the newest industrial plant needed in the war effort and managed many of them. At the end of the war when there were 101 government-owned corporations. they were examined to see which should be retained, and during the next five years-1945 to 1950-the total was reduced to 85. There are still a great many; since they are no longer justified on the ground of emergency, it must be on some other basis.

The central problem with regard to public corporations that I see in the period beyond maturity is the use of them for inappropriate purposes. A person whose main consideration is ideological, who advocates socialism, might not agree, but from my standpoint he is not thinking clearly. In the United States, for example, the Commodity Credit Corporation, at its peak, held as I recall it, some 12 billion dollars worth of surplus agricultural commodities, such as grain, corn, and wheat. Its principal function is to store these surpluses, building the facilities where needed, and the cost of this operation over long periods is so great as to be unreasonable.

Why is public corporation for this purpose needed today at all? Why not, as an alternative, create a bureau within the Department of Agriculture? Is it so difficult to build warehouses for storage, and to arrange for the sale of surplus foodstuffs? Certainly not. In his 1956 report on Indian

administration, Paul Appleby argued that in government there is no real difference between a corporation and a department. I think he was wrong with regard to the central issue, but right with regard to the Commodity Credit Corporation which he knew well as a result of having been Under Secretary of Agriculture.

The Commodity Credit Corporation is not run by businessmen. The members of the board and the managers of the corporation are like other officials of the Department of Agriculture. The board is made up of the Secretary of Agriculture, the Under Secretary of Agriculture, and a few other public officials but they are just window dressing. So why use a corporation for a purpose of this kind? It is partly that such issues are not resolved—that too often a public corporation is not run like a corporation but is only called a corporation—that in the United States the device has acquired a lower reputation and many people have concluded that it has no real use.

An important point, therefore, is that the public corporation should be used only for trading purposes where actual trading occurs. If the purpose is to offer a subsidy, as in the example of the Commodity Credit Corporation, then there is no prima facie case for the corporate device. If the purpose is simply to build something, then again, I see no prima facie case in favour of this device. But if the purpose is to build a business and then manage it, and if the business has a commercial sales aspect and it is considered good public policy to earn a profit, then I think that there is indeed a prima facie case for the use of the public corporation.

Other areas in which the use of the corporate device seems unwise public policy during the mature stage of development is illustrated in the field of atomic energy. Atomic energy involves the development of a new programme, but unless the government is actually going to use this energy itself to produce power, or for other purposes, then there is no prima facie case for an independent corporation to deal with atomic energy.

However, there is another factor that operates here. Where private enterprise cannot attract the capital with which to pursue a particular undertaking, frequently the government adopts the corporate device in order to conduct the programme in as business-like a manner as possible. In the case of atomic energy, private firms and investors did not have the enormous funds needed to develop the field, so the government had to assume the responsibility. This created yet another major issue—one of the sharpest in the United States today—for it concerns the use by private companies, like public utility companies, of atomic energy to produce electrical power.

In yet another illustration, in the United States the government is developing the whole field of communications by satellites, and now a mixed corporation is exploiting the project commercially.

Another area that becomes important from a policy standpoint, once the mature stage has been reached, is the use of the public corporation to secure public revenues in lieu of taxation. The economic reasoning on this question applies to some extent to the developmental stage as well as to the mature one. Thus, many municipalities have bought the local electricity or transportation system in the expectation that profits from their operation will reduce the local tax rate.

This development has occurred even more widely in Europe. Perhaps it is a live issue in India as well. Economists argue that profits on essentials such as transportation and communication are similar to a regressive tax because they fall relatively more heavily on the poor than on the rich; that consequently the objective of economic policy should be to reduce the cost of these services as much as possible, to make only a minimal profit, and to secure additional revenues through direct taxation.

In addition, some of these services are so essential to other areas of economic development that their cost should be kept to as low a figure as can be economically justified. This applies especially to transportation and electrical power. Cheap power rates attract certain kinds of industries. The reason the Fertilizer Corporation of India uses more than 60 per cent of the energy from Bhakra Dam is that electricity is the method by which this kind of fertilizer is produced; in this case, a main factor in the cost of fertilizer, which is badly needed for agriculture, is the financial policy governing the sale of electricity generated by a government enterprise.

The thinking of economists in this area is sound and therefore one of the dilemmas of socialist theory occurs at just this point: If enterprises are taken over from the private sector and run by the government with the expectation of making large profits, then in the light of total economic considerations, in both the mature stage of development and the following one, the policy may constitute a brake on economic development in the future.

The need at all-stages is to avoid thinking separately, as public administrators traditionally do, about the structure and the administrative characteristics of the departmental, the corporate, and the mixed-enterprise devices. Rather, these matters should be considered in the larger context of economic development and the strategy by which it is encouraged. At certain stages of growth, certain devices can be justified on the ground that they are essential at that particular time and in the expectation that later they may be superseded by something else. In the mature stage, too promiscuous a use of the government corporation may bring the whole device into disrepute. One reason the public corporation has been largely neglected in the United States in the past few years might be that it was promiscuously used in at a time when it should have been superseded, so that people have lost sight of its inherent advantages.

My final point is that on the basis of an historical perspective and realistic thinking, it must be concluded that there are inherent advantages in the corporate device that make it an essential part of modern public administration.

I have tried to point out what these are by dealing with the subject historically rather than analytically. Now let me simply enumerate these advantages:

The public corporation is a separate legal entity; it enjoys an autonomy of its own; it can sue and be sued. The public corporation is free of the centralised controls which tend to slow down governmental administration in the regular departments. The public corporation is also free, if necesary, to adopt a salary scale higher than that of the rest of government under civil service. The public corporation may buy more freely than the government in its traditional functions. And finally, the public corporation emphasizes sales and is, therefore, more likely to produce energetic administration than that which does not have a sales orientation.

In the public corporation there is an incentive that is either partly or wholly lacking in the case of ordinary governmental departments: the profit incentive. There is also the incentive of being free to retain all or some part of its profit in order to expand and improve its operation. In the developmental stages, some of this profit is usually reclaimed by the central government as the means of financing other needed programmes.

The public corporation is ordinarily governed by a board whose members have a business outlook, who determine policy and hire the managers, thus encouraging more drive than is usually possible under centralised control. Finally, because of the financial and managerial tools that are more readily available, it is easier in the public corporation than in most traditional governmental activities to determine the efficiency of operations.

These advantages are so great that they should not be lightly dismissed, but they may be if the corporate device is not appropriately used. It becomes a matter of considerable economic judgment in the field of public administration, therefore, to determine when it should be used and when it should be avoided.

THE PLANNING FUNCTION

In all stages of economic and administrative growth, planning is a central function. At first glance it might appear that the importance of planning increases with growing complexity, that as this organism which we call the economic, political and social system becomes more complex, the degree of planning must keep pace with it. But in fact, experience seems to point in the opposite direction. It is possible that planning is more necessary in the early stages of economic and administrative development, and becomes less so as complexity increases.

To state the proposition in such terms, however, avoids the real issue, for it is less the degree of planning that is in question than the distribution of the responsibility for planning. The overall amount of planning probably increases with complexity, but at the same time, the concentration of planning in a few places tends to diminish. Thus, in the early stages of development I believe that the tendency is to concentrate the planning function, and that later it becomes more widely dispersed.

If this thesis is correct, then the question that immediately arises is, Why? A main reason is that as the pace of leadership in a developing society accelerates and more people acquire managerial ability, they are increasingly able to assume a wider responsibility for planning as an integral part of their executive work, and hence the planning function can be dispersed among them. By contrast, in the early stages of development when managerial abilities are less common, the responsibility for planning must necessarily be concentrated in one or a few places.

The role of planning in the stages of administrative growth depends to a considerable extent upon how the

planning function is viewed. I suggest that to plan is to implement a design, with the emphasis upon implementation. A plan is not merely a paper scheme, it is not a Utopia, not a series of objectives. A plan is the advance determination of the step by step procedures by which effect is given to a particular design. Above everything else, therefore, a plan is instrumental. When we lose sight of this basic fact and speak of planning as the equivalent of democracy, the equivalent of socialism, the equivalent of prosperity, the equivalent of the good life, we are doing a disservice to the planning concept. In fact, planning is a neutral concept, a tool, a practical consideration to be used for a variety of purposes irrespective of the particular ideology that is involved.

In all stages of growth, planning constitutes a large aspect of administration. The administrator plans his objectives, his policies, his organization, his financial system, his budgetary system, his purchasing system, his schema of delegation, his method of supervision, his means of co-ordination, and his relationship to his clientele, sometimes called public relations.

In other words, from one standpoint it may be said that every aspect of administration is planning. In addition, of course, administration also involves human beings and hence must be concerned with incentives and human relations, factors that cannot be treated with as much precision as some others such as organization. Nevertheless, every member of a particular undertaking has some part in the administration of plans and hence it becomes necessary to show how planning is part of the overall function of administration.

There are three principal kinds of planning and all of them are involved in administration. The first is administrative or operational planning, the kind that takes place, for example, in the top ranks of a Ministry or a large corporation. It is the development of long-range objectives and strategy. The second is work planning, which ordinarily occurs at the lower levels of the organization

and has to do with techniques, sometimes called O & M. This kind of planning is the laying out of the step-by-step processes and procedures by which a particular project or programme is carried out. The third type of planning, the one with which we are primarily concerned here, is national economic planning.

National economic planning depends, of course, on a great deal of under-pinning which is planning of the first two types—planning by department heads and work planning. National economic planning is also influenced by the stage of development in which a particular nation finds itself. In the first stage, the traditional stage, the primary need is to make government and public administration as effective as possible, and hence planning must concentrate on improvement in these areas.

At the next stage of economic growth, which is the preconditions stage, public administration remains an important factor but in addition, it is necessary to consider certain other factors such as better power, transportation, and communications, as well as the educational system as a means of developing more leadership.

In the third stage where the take-off occurs, in addition to the areas already mentioned there are now others that need intensive planning. One of these is the accumulation of capital and the creation of the various institutions by means of which, through investment or taxation, the funds needed to expedite economic development are made available. In this stage also, agriculture becomes extremely important and hence planning for and improving agriculture becomes a crucial aspect of development. In addition, foreign trade and foreign investment must be studied because a developing nation must decide whether it will try to attract foreign capital and management, or whether it will allow its own national sufficient credits to encourage imports and exports, considering the bearing this is bound to have on the balance of payments and the fiscal solvency of the government.

Once the state of maturity is reached, all these areas remain important but there is also an acceleration in areas that complete the structure, what might be called the refinements of the economic system. Technical education, for example, is one of these. The right relation between the public and the private sectors is another. And in the matter of centralized planning, there is now the problem of how much or how little is needed.

Finally, in the fifth stage—where the United States is today—the principal problem has to do with equilibrium. There is now a high-speed economy subject to rapid fluctuations. It can become manic and get the jitters; it can generate a serious inflation or a disastrous deflation that have a much wider effect than when the economy is less complicated. In other words, the greater the stage of development, the greater is the need to exercise strategic controls in order to maintain a rather delicate equilibrium. At this point the problem is not so much growth—although that also is important—as it is the need to keep the economy on an even keel, to control tendencies toward inflation on the one hand and depression on the other.

For a country in one of the pre-maturity stages of development there are in general three approaches to national economic planning.

The first is to work through existing instrumentalities such as the regular governmental departments—that is, the normal framework of government—simply adding to them the best thought of a team of economic advisers. This is the simplest, most streamlined form of organization for national economic planning. One merely sets up a group of economists from one's own country or from some other—several international agencies are available for advice as to where they may be secured. This group offers economic advice to all the principal officials, beginning with the Prime Minister, who plan and administer governmental programmes. In this scheme the Finance Minister is a key official because he controls taxation and the supply of money, two major factors in maintaining national solvency.

The role of this group of economic advisers is a central one because they consult wherever in the government their assistance is needed. Their principal job, as contrasted with that of the heads of the regular departments, is to see things whole, in relation, in an integrated fashion so as to alert each top official in the government as to what he should look for; what he should do; what his choices are; and what the effect is likely to be if he takes one course of action as against another.

The second approach to national economic planning is the setting up of a development agency created ad hoc for this purpose. This agency is relatively small and its direction is close to the chief of state. Because of this intimate relationship, the director's scope is generally wider than that of cabinet ministers. Speaking on behalf of the chief of state, the director plans and also to some extent he does operationally what a different kind of planning commission does in terms merely of a paper project which somebody else administers. Or putting it another way, the kind of development board or commission we are considering here combines a plan with some aspects of its operation. The director works for the most part through other departments, but he is also free to operate independently in areas where new programmes are needed outside of the regular departmental structure. His principal work, however, is negotiation and decision-making.

A good example of this kind of planning occurred in Puerto Rico where the head of the planning agency had the complete confidence of the Governor. The director was an able promoter, a good public relations man, adept at attracting new industries. His manner was diplomatic and his business judgment was sound. He simply considered the whole of the country as his responsibility and addressed himself mainly to the problem of how to make money for it through economic development. After reviewing his ideas with the development board and getting the approval of the Governor, he was then permitted, where there was no existing agency to do the job, to borrow money, to float public

loans, to start new kinds of enterprises, and to loan money to new businesses attracted to Puerto Rico from the outside. In this particular instance the approach to development was outstandingly successful, in part at least because it combined planning with execution and hence there was no waste motion. In addition, of course, the Puerto Rican government was just lucky enough to have a man with a great capacity for this kind of undertaking. A different kind of director, lacking the needed qualities, might have made a failure of the whole thing.

Finally, the third approach to the problem is through what might be called comprehensive economic planning. By this I mean a centrally located board or commission responsible, in cooperation with all the major departments of the government, for developing a plan for the whole of the economy in as great detail as possible, and then working out, also in considerable detail, the various assumptions and administrative responsibilities for its execution through the regular departments.

In other words, in comprehensive economic planning the two parts are the preparation of the plan and the guiding of the execution of the plan. Under the first two approaches that I have dealt with—the small committee of economic advisers or the small action unit, strategic planning is superimposed upon the existing organization and machinery and hence has a more specific and limited task. Therefore, the need to go into minute detail is less than in comprehensive economic planning of the third variety. This results in less bureaucracy and speedier action in the execution of the plan.

For a developing nation, the fundamental issue is which of these three approaches to adopt. Obviously, there are advantages and disadvantages in each. The principal advantages of the first two are that they are small, they do not interfere unduly with the work of the regular departments of the government, they require a minimum of the energy of government, they can focus on administration, and they are simple enough to avoid the long costly delays

that often stem from the complexities inhering in the more comprehensive type of economic planning.

Whichever approach is adopted, however, success depends upon the extent to which self-governing ability is widely distributed within the economy. Let me explain this more fully because it is a major point.

Walton Hamilton, an economist and later a professor of law at Yale University, wrote among others a book called The Power to Govern, in which he argued that the most important question in any country is the degree to which the ability to govern and to manage is widely distributed. Where managerial talent is largely lacking, said Hamilton, reliance must be on authority and status. But where this ability is widely available, reliance may be on contract and self-government. Hamilton believed that the future of both democracy and of prosperity depend upon the power to govern, the ability of groups to govern themselves, thus relieving the burden on government proper.

Applying this idea to the problem of planning, certain conclusions are evident. Thus, all government departments must plan and the more they do, the better is their work. Equally, all private agencies must plan, and the more they do, the better is their work also, and the more profitable their operation. There is not a large corporation in the United States that does not regard planning as its single most important managerial function.

Some have even divided the planning function along the lines that I have suggested here: Below the president and to the right of him is a vice-president in charge of long-range planning who reports to the president and the board of directors. At the next lower level is a regular department headed by the operating vice-president who is responsible for what I call organizational or administrative planning, that is, planning as an integral part of on-going operations. The relationship between these two vice-presidents is that as ideas are developed by the man in charge of long-range planning, they are communicated to them an in charge of

operations so that steps may be taken to put them into effect as far in advance as seems warranted.

Indeed, one reason that planning has become so common in American business enterprises is that frequently, in order to build a new process or a new machine, it is necessary to start not five years but perhaps twenty years in advance. If a company can start twenty years in advance to build something that is going to be extremely successful, it gains a competitive edge over its rivals. Hence in terms of incentive, planning is increasingly recognised as the basis of successful competition.

An issue that now arises is whether, in relation to the stages of economic growth, it is desirable to divide planning into two parts. The first is long-range planning, organizationally located off to the side, employing only a small staff, and looking a long way ahead to determine what the problems of the enterprise are going to be. The second is a planning mechanism centrally located in the machinery of government, responsible for short-range planning within the larger framework, and enjoying the advantage of being able to act more vigourously than is possible for the long-range planning unit which, by its very nature, is not an action agency.

The question is, shall long-range planning be differentiated from short-range planning and these two aspects of the function held separate, or should they be combined into a single comprehensive, centrally located agency in the administration? The issue is of some importance and cannot be settled lightly. Let us, therefore, consider some of the factors to be taken into account before a decision is made.

One way to resolve this problem is to try to identify the areas that must be planned if a nation is to survive, which is putting the issue on a pretty elemental level. The question is not how to raise the standard of living or promote prosperity, but how to assure survival itself.

The first area needing planning attention is the balance of trade and international payments. Some nations are

more vulnerable in this respect than others but none is exempt. If over a period of years the flow of gold out of a country is greater than the flow into it, then the currency becomes shaky. If imports commonly far exceed exports, it is inevitable that there must eventually be a reckoning, and nations like Turkey, for example, come virtually to the point of bankruptcy.

The second area that must be planned in order to assure survival is tax policy. This is important because when money is spent on necessary public works like the Bhakra Dam or the Fertilizer Corporation of India or steel plants, much capital is needed. Some can be borrowed from abroad, but to assume that this approach alone will solve the problem is, of course, unrealistic. Such funds are never enough, most of the capital needed must be produced at home.

Consequently, people with money to invest must be attracted to domestic enterprises; in addition, people with large incomes, whether from salaries or investments, must be quite heavily taxed so that the proceeds may be invested in national undertakings. In the United States, the individual income tax rate on wealthy people earning, say, \$200,000 a year, is 90 per cent, and the tax on corporation income is 52 per cent, so there is a saying in the United States that every large corporation and all men of wealth work primarily for the government.

It may be objected that it makes little sense to earn a great deal of money and then have much of it taken away through taxation. But in fact it does make sense because many people gain their principal satisfaction out of earning a lot of money, being considered successful in financial terms, enjoying the competition and struggle that go with the effort. In these cases, total income is so high that even the 10 per cent remaining after taxation allows a man to live very adequately. Hence an important principle of planning for development is a constant attention to tax policy. In Turkey, for example, all of agriculture, including the cotton millionaires, is exempt from taxation, and

hence the whole tax burden falls upon businessmen. This does not serve to stimulate industry. It seems axiomatic that when a disproportionate share of the tax burden falls upon one segment of the economy, that segment is not going to move very far. Hence the national tax burden must be more evenly and more widely distributed.

The third area crucial to survival is capital accumulation, and here the government must clearly plan and exercise controls. Irrespective of the approach to planning that is adopted to further the accumulation of capital, the primary need is for information, for research as the basis for the encouragement of investment. If the best solution to planning is the team of economic advisers, it still must have the facts for the use of both the government and the investing public. The same need appears in any form of comprehensive planning.

The fourth survival area is the prevention of inflation, especially in the case of basic commodities. Experience seems to show that immediately after planning begins, for a short time there is a relative decline in the standard of living because of an increased tax burden for the benefit of new public programmes. In the early years, for example, the USSR acquired its power for the most part at the expense of the farmers and peasants. I think it can be offered as a general conclusion that the cost of rapid economic development falls relatively heaviest upon farmers, which is one reason they become so restive and unhappy.

Nevertheless, such a burden should be only a temporary one. Once investments begin to produce in areas such as electrical power, transportation, the production of steel, and the like, then there should be some visible improvement in the lot of the common man and the farmer. Surely one of the main objectives of planning, therefore, is to bring this improvement about. The question is, are tangible results more likely to be accomplished under broad comprehensive planning, or under one of the two less comprehensive systems? On this issue, each must make up his own mind.

These four survival areas—the balance of trade and international payments, tax policy, capital accumulation, and the control of inflation so that the common people may have some tangible benefits—are the crux of what planning must accomplish irrespective of which of the three approaches is adopted.

Let us turn now to the pros and cons of the widest kind of comprehensive planning because in this country there is a special interest in that subject. I have suggested that this kind of planning is justified only when managerial skills are in short supply or when, for some reason, a less ambitious approach cannot be used. If farmers already know how to produce more food and fiber than they do, that problem might simply be turned over to them to solve for themselves. Under such circumstances, skilled planners If enough businessmen know how to needed. are not develop public utilities and medium sized industries without central direction, they would need merely to be told to go ahead, with perhaps some controls over the balance of payments and authorisations to acquire foreign credit. But where these managerial skills are in short supply, then there is a prima facie case for comprehensive planning on a broad scale

In this case, an important question is whether comprehensive planning can eventually increase the supply of needed skills and more widely distribute them. If the answer is in the negative then it would seem inevitable that both planning and execution will have to be done by means of a stern discipline in which people are given clear orders as to what they must do, and every move is worked out in considerable detail. In a situation where discipline can be successfully imposed, this procedure might work, but where such discipline is lacking, then success seems doubtful.

One difficulty is that in a comprehensive plan, irrespective of how patriotic people are—and I assume they are patriotic—there are bound to be deep differences of opinion. One group, for example, may accuse agriculture of shirking

its part, and agriculture may rebut that it is paying more in taxes than any other sector of the economy. Businessmen may sense a desire on the part of government to destroy them, and conclude that they had better get as much as they can while they can. The large landowner may wonder why he should produce to capacity if the government is going to take his profit through taxation. These are honest differences of opinion but they tend to stimulate political debate and the result is to hamper the execution of planning.

What stimulates people to action? It can only be by voluntarism or by compulsion. A democratic government hesitates to use compulsion, but comprehensive economic planning by its very nature seems to require a degree either of self-discipline or of compulsion in order to succeed. An advantage of the other two approaches—the small economic team of advisers or the small developmental authority—is a superior authority over and the ability to work through other departments and agencies, making use of their self-governing abilities.

To illustrate, there is the problem of agriculture. The first move is to identify the self-governing agency for that sector of the economy. In the United States there are three main ones, the American Farm Bureau, the National Grange, and the National Farmers Union. Each of these three organizations is consulted and asked to exercise some leadership and responsibility for making agriculture move forward in a given direction. At the same time, the federal Department of Agriculture's county agents, of whom there is one for each of our more than 3,000 counties, are alerted and made responsible for seeing that the plans for agriculture are carried out. The results may be favourable and they may not.

In another example, if it is businessmen who are concerned, then the U.S. Chamber of Commerce, the National Association of Manufacturers, and the Committee for Economic Development—these being the three main groups representing businessmen—are consulted and urged to

exercise self-government, to get industry and commerce to move in a given direction. In most cases, businessmen do their best because they like the idea of self-government. Consequently when government proposes to delegate a particular responsibility to them, they generally accept quite readily. They also know, of course, that if they refuse to co-operate, the government will act without considering them, which is pretty good psychology.

These examples show that when government approaches agriculture or industry or the professions or any other organized interest such as labour, it is, in effect, multiplying the leadership needed for economic development and encouraging it to use its own self-governing powers. result is to reduce the burden of what needs to be done centrally. Perhaps even more important is the chance to combine the power to plan with the power to act, because these self-governing groups do have the power to act. In any trade association—which is another form of business organization—the word goes out from a meeting of the directors: this is our quota, this is what we are going to do. Because, businessmen think so highly of their trade associations and their reputation, they will bend every effort to follow these guidelines and compliance is almost a foregone conclusion.

There is yet another important factor to be considered. It is sometimes argued that the more meticulously one plans, the more meticulously must one also work out all the details of administration and execution. It is said in India, for example, that the formulation of plans has now been perfected and that the big remaining area to be just as carefully worked out in minute detail is the execution of the plan.

The trouble with this assumption is that it violates nearly every principle of administration. Administration planned in too great detail becomes rigid, objectionable, bureaucratic, and prone to failure. I submit, therefore, that as a matter of fundamental principle, the best formula for planning is centralization of plan formulation, and,

decentralization of operation. If any formula has been proved beyond a doubt, it is this one. Along with it is the need to consult the interests affected when the plan is formulated. These interests must later administer the execution of the plan, and they will not act with full conviction unless they have been made a party to the project from the outset.

I submit, therefore, that if any kind of planning system gets to the point of insisting that the execution of the plan must be as carefully formulated as the plan itself, there is reason to be concerned about the future. Such a course is not the way to vigorous administration.

Consequently, I believe that those who facilely argue, "The more planning the better" are not thinking clearly. I believe they should qualify their statement to read, "The more planning of the right kind and at the right time, the better." The reason for the qualification is that successful planning must be made in integral part of administration, managerial talent must be widely dispersed throughout the economy, and people must be persuaded to exercise initiative and to assume responsibility. Under these conditions, effective competition in international trade may be pushed with the most efficient countries in the world. But in nations where administrative ability is narrowly held and initiative is circumscribed, the competitive situation is not encouraging and many other countries—socialist, communist, capitalist—will do a better job.

From this I conclude that far from being always a prelude to Utopia, if we are not careful planning may be a delusion and a snare. It becomes a substitute for clear thinking. Planning depends upon many variables in each individual situation. There can be too much of it, if it is of the wrong kind, and there can be too little. The purpose of planning is not to substitute precise action for an entrepreneurial spirit, but to encourage people to exercise their powers of self-government so as to develop more energy throughout society.

Applying this analysis to India, there would seem to be certain areas that should be carefully watched. One of these is the assumption that execution must be minutely planned. Another is the relation between government on the one hand and agriculture and industry on the other. In a democratic country, if agriculture fails, then it is doubtful whether a plan of any kind can succeed. Moreover if during the developmental period the cooperation of private industry cannot be secured, then again, it is questionable whether any plan can succeed. Unless, of course, the nation were to rely upon a degree of discipline to the point where it did not matter what the business community thought.

Yet another area that needs careful watching is the relation between the institutions of government and those that produce skills and potential leadership, by which I mean the universities. If there is going to be a rapid multiplication of administrative skills, the universities are the source from which they must come. For my part I would favour putting more younger people—around forty years or so of age—into positions of responsibility in order to hasten the development of administrative ability as the means of combining planning and execution in a single operation.

In conclusion it seems clear that planning does depend upon stages of growth, and that what a country does in this respect depends upon a number of ascertainable factors. Among these, the most important is whether the ability to manage and to exercise self-government is limited or widespread throughout the national economy. When these factors are widespread, then much of planning can be decentralized and only those areas essential to survival, as earlier noted, need to be centralized. The advantages are that planning then becomes more manageable, and in addition, there appears a greater opportunity for the exercise of initiative and leadership in all segments of the economy.

VII

THE NEW POLITICAL ECONOMY

In this final lecture, instead of summarizing what has been said in this course, I shall try only to project what is likely to happen in the future. I have argued that in all stages of economic growth the common factor is political economy. I have also argued that once this is recognized, then differing ideologies become relatively less important as attention focusses on an analysis of the common factors and principles that apply in all nations in all stages of development.

Political economy is a concept that has been held for many centuries, and I refer to it now as new because I believe that all over the world there will be a return to the original idea.

In view of the present clear divorcement between economics and political science, such a prediction may seem rash. For the past forty years I have belonged to both the economic and the political science associations in the United States and I read their journals. In recent years I have sometimes found it hard to understand articles appearing in *The American Economic Review* because so many deal with higher mathematics. I am consoled by the fact that most of the economists with whom I talk do not understand them either.

Something similar seems to be happening in political science, at least in the United States. A growing number of people appear to believe that the object of scholarship is to develop an unintelligible vocabulary. In theory, at least, this could mean that only the "initiated" are capable of governing, implying some kind of minority rule. When a methodology becomes so important that it is regarded as

an end in itself, so that finally one deals only in mathematical models; or, as in the case of political science, one starts with the assumption that a particular concept cannot be used in the real world, then I think we are making a serious mistake. As a practical matter the social sciences are needed as a guide to public policy, to economic growth, and if they fail in this role, then it is a serious betrayal of public confidence.

Political economy is a field that combines economics and political science. Although in England and the United States these two disciplines began to go their separate ways 75 to 100 years ago, political economy as such has never been wholly supplanted. In Scotland, for example, economics and political science are still joined and called political economy. In Canada at the University of Toronto, which has one of the best social science departments in the world, it is called the Department of Political Economy and includes both economics and political science as separate but related disciplines.

In addition, the number of books using the term "political economy" has been rapidly increasing. Recently in Lucknow, for example, I found that Professor Mookerjee has written a book—one of about forty—in which he also uses the term "political economy".

I mention these developments to show why I am optimistic about the resurgence of the political economy concept in an age in which the separation between politics and economics is still very wide. There seem to be some signs that a rapprochement is taking place. I believe that the need to bring them together to serve as a guide to the formulation of national policy is so great that neither academic institutions nor professors themselves will be able to resist the pressure for very long.

Political economy was originally the means by which a ruler developed the economic wealth of his country in order to increase its strength. To this end he needed not only an efficient administrative corps but also advisers who knew a good deal about economics and about wealth. He also needed to create institutions such as the corporation in order to promote business operations, at home and overseas. During the first period in which political economy was regarded as a distinct concept—and in Europe this was as early as the end of the 15th century—political economy was the means by which public administration encouraged economic development on behalf of the ruler.

Political economy was the main ingredient of mercantilism, which held an able administrative corps to be indispensable. It also stressed the organization of the state for trading purposes, both internally and externally. It recognized the importance of money, currency, and especially gold. It stressed the need for balance between domestic and foreign trade so as to increase the power and prosperity of the nation.

Economists have been inclined to reject the whole idea of mercantilism on the ground that it was contrary to Adam Smith's ideas of laissez-faire. Although this is understandable, there were aspects of mercantilism that are still relevant and we should understand and adapt them to modern conditions. Some of our most astute writers believe that we seem to be going into a period in which the conditions are similar to those of the era of mercantilism. One authority on this subject is Eli Heckscher, the author of two volumes on mercantilism. There is also an excellent book by Professor Philip Buck of Stanford University, on The Politics of Mercantilism, which I recommend for your careful attention.

Following mercantilism, cameralism as a body of thought grew up in Germany, and in France the Physiocrats appeared. In both cases there was a continuation of the idea of mercantilism but certain other elements were added. There began to be dissent from the notion that economic development is a royal prerogative. There was a search for the sources of wealth. The Physiocrats found it in the soil, in agriculture, and immediately began to think in terms of natural law, of living in accordance with the laws of nature,

and hence they tried to discover the natural laws of economics and politics as well.

Subsequently, during a long period in the history of both economic and political science, the search for natural law continued. Also, the belief remained that the getting of wealth depends upon a skilled corps of administrators, for without skilled managers there can be no economic development for the nation. Today we are rediscovering that the more able a nation's managers and the wider their distribution in both government and the economy, the more rapidly does a nation develop.

This early period in the history of political economy laid the foundation for Adam Smith, who was not an economist but a political economist. His first book, The Theory of the Moral Sentiments, was advice to statesmen; in it he argued that the factors that make for a great society and hold it together are moral. Most important is the feeling of empathy, of mutual affection and respect among people. A nation's morality is determined primarily by its rulers and its administrative corps, the people who run the country. Therefore, a nation with able leaders of high moral standard will come nearest to Utopia than any other.

Later, Smith wrote *The Wealth of Nations*, which starts with the positive statement that in any country, the most important group is its moralists and law-givers because it is they who establish its policies. Businessmen he places in a different category as practical people who know how to create wealth, but if they are to serve their own interests and also those of the nation, they must understand the laws of nature. Smith finds the public interest not only in natural law but also in public morality as administered by public officials. Natural law favours a high level of production, a strong profit incentive, and a degree of equilibrium that will prevent a concentration of power. A concentration of power leads to monopoly and monopoly is a brake on growth.

After Adam Smith, during the mid-19th century, political economy began to divide into two parts. One came down

through David Ricardo who set out to develop economics as a pure discipline divorced from government and having no relation to policy or morality. He sought a system composed entirely of natural law with materialistic gain as the all-sufficient incentive and the only means by which value or utility might be determined.

The second part of political economy came down through the Utilitarians, especially John Stuart Mill who was chiefly interested in what the law-giver and the administrator must know. A universal principle was found in utility, which is the greatest good of the greatest number. The test was pleasure and pain, right action being pleasurable and wrong action painful. Hence everything in life is either reward or punishment.

On the basis of this principle, law-givers and administrators must develop a philosophy by which to determine the utility to society of policies producing pleasure and pain. In addition, the Utilitarians devoted much attention to the age-old conflict between private and public interests. Even today there is no better source than the writings of the Utilitarians for an exploration of the concept of the public interest.

At the end of the 19th century the establishment of the American Economic Association in the United States was an attempt to bring politics and economics together again. The primary motive was to create a working relationship between politics and economics in order that public policy, the most important factor in economic development, might be dealt with by an organized body of knowledge. If economists know nothing about institutions or organization or administration, and if political scientists know nothing about the content of policy, how do the two ever come together in the formulation of public policy? Although the attempt to achieve a rapprochement was only partially successful, there did develop a group of so-called institutional economists, bona fide political economists, among whom appear such great names as John R. Commons, Thorstein Veblen, and Wesley Mitchell. The interesting

thing is that the number of institutional economists is constantly growing. Most of those whom I have mentioned in this course—Gardiner Means and Robert Heilbroner among others—are institutional economists whether they call themselves that or not.

Along with these developments in economics, a growing number of political scientists have reached out to re-establish the link to economics, and here again, the number of such persons is constantly growing. One of the main trends in modern political science is towards public policy. In public administration there is much re-thinking in order to include more attention to public policy, which automatically means more economics.

There has also been the great influence of John M. Keynes, the British economist who broke away from classical theories and argued that if government fails in certain functions, like making sure that the nation's capital is invested in new plant as needed so as to create more opportunities for employment and the circulation of goods, the whole economic system will collapse. At the very least, said Keynes, the state must either operate the banking system itself or see that it is operated in such a manner as to assure a flow of new investments in periods when businessmen, because of timidity of caution, might refuse them. This argument again focussed attention on the working relationship between politics and economics. A careful reading of the journals of economics supports my prediction. I believe, that within a generation, politics and economics will be recombined into single discipline focussing on public policy.

Let us now turn to some of the problems that grow out of the political economy concept.

Political economy is the managerial approach to economics; managing the economy is like managing any business except that the economy is larger. Every economy has a certain structure and is guided by a group of key individuals. Every economy must emphasize policy and the

need to adjust to changing circumstances. Under these conditions, the management of the economy may be either by a dictatorship, or it may be by means of a decentralized system in which people learn to understand and to accept the principles and rules of political economy so as to make the system work in a free society.

If any system of management is to work in a free society, however, it is necessary to understand not only the roles, the objectives, and the priorities essential to planning; it is necessary also to understand what constitutes the public interest. In India as in the United States, there is no more important question.

With a better comprehension of the public interest, for example, there would be less corruption in government and less concern with punitive measures against the offenders. Commissions to study corruption create an atmosphere of spying and snooping that harms the whole governmental administrative system. Administration suffers in an atmosphere of mutual distrust. The solution of the problem of ethics in government is not more police action, but a clearer conception of what constitutes the public interest.

Some people see the public interest as a vague concept that cannot be defined. Some argue that the public interest is what every person thinks it is. I would uphold the right of every man to determine for himself what constitutes the public interest but that is not the solution of the matter either. I believe it is possible to define the public interest in a way that is generally valid.

Thus, the public interest is the common values in society that transcend selfish interests. Examples of these values are due process of law, justice, tolerance, respect for the opinions of others. Yet another is competition, not only in ideas but also in the economic sense, on the assumption that competition tends to discourage the inefficient and to encourage the efficient so that society moves forward. The public interest is respect for truth and morality, the belief that a deliberately immoral action hurts not only society but the individual as well.

The public interest also upholds individual integrity and independence as against servile subordination. The public interest is providing people with an opportunity to grow, to develop, to improve themselves in a condition of freedom.

The public interest has concrete implications. People willing and able to work, for example, should be compensated in accordance with the effort and skill they bring to the job. There should be equal pay for equal work irrespective of other individual differences. The public interest also means that in order to grow, people need and should be provided with education. They should have access to adequate housing, clothing, food, and medical care. Society should be organized in such a way that ambitious men and women can reach high levels of satisfying accomplishment.

In the deeper philosophic sense, everyone must think through for himself the question of how to reconcile his own private interest with the wider public interest. To me, the best answer is found in growth, which is the theme of these lectures. Man's two main interests are personal self-development and social contribution. If his personal interests cause him to grow, then society also benefits. The problem of every individual, therefore, is to find a life's work or field of action that contributes to both interests.

From this it follows that what political economy needs most is what may be called public persons. Such persons are not confined to government. Rather, they appear everywhere—in industry, commerce, agriculture, labour, or the professions—as individuals who have constantly before them the question: How can I reconcile my personal interests and my contribution to society?

In economic terms, the public interest is protected by public policy. Public policy is all the general rules and principles that people establish for themselves, in both the private and the public sectors, that contribute to the public good. Consequently, in stages-of-growth terms,

a principal concern must be to promote the groups that arise naturally out of the structure of the economy.

Thus, farmers must be encouraged to organize because no nation can go very far without agricultural associations as spokesmen for that segment of the economy. There must be similar associations for organized labour because the modern age cannot be attained without their assistance. There must be associations in law and medicine and the other professions for the same reasons. Only by means of the self-government generated by such groups can public policy be developed on a voluntary basis, and the voluntary basis is the only one that will be readily complied with, that will not eventually have to be enforced by government.

If government rejects the principle of association and tries to operate without the aid of the voluntary groups, then its task will soon become so burdensome that it may fail in major functions. Decentralization does not merely mean decentralization in administration; it also means the devolution of responsibilities to self-governing interest groups. I have said that I believe India must improve some aspects of its administration. A principal means is to devolve certain functions to responsible interest groups. Government has the resources and power to plan, to tax, to coerce, to do what is needed to maintain equilibrium and balance among organized groups. But before some of these powers are exercised, interest groups should have a chance to show what they can do through the means of their own self-government. This is one of the best ways to assure the kind of administrative vitality and widespread participation in public affairs that stimulates rapid economic growth.

Public policy is coming everywhere to be one of the most emphasized areas, more emphasized even than planning. Consequently the new political economy must create a corps of skilled workers who—whether they operate in the public or in the private sector—have common skills, common knowledge, common attitudes, and a common sense of the public interest.

To this end, businessmen in the United States, for example, are taking an active interest in politics and statesmanship. Similarly, top policy officials in government are studying economics so as better to deal with issues of public policy. The degree to which these efforts succeed will largely determine whether the United States can continue to be free under the guidance of private management, or whether it succumbs to some kind of minority rule.

Here is one of the reasons for the controversy over the differences between the public and the private sectors. In the United States, more and more people are being trained in industry, in labour, in the professions, and in the universities for high-level government service. The result is to raise the compensation of professors to compare with the highest levels in government service, thus gradually acheiving equality between the higher positions in industry and in government. Because the number of people who can handle these policy jobs is limited, government looks for them in the university class rooms, in the corporations, and in the professions. In most countries, the great shortage is of managerial skills, especially for positions concerned with policy questions.

Administrators with these special managerial skills to be used for policy determinations are sometimes called "the new elite". I would place political economists in this group. In all countries—the USSR, the USA, Communist China, or the Republic of India—there is the need to train this kind of person.

If I may speculate for a moment, I wonder how this line of analysis applies in the USSR. Marxist theory supports a classless society, but as a political scientist I cannot believe that the Soviet Union will ever be able to dispense with their managers. Indeed, they admit it, saying that they will abolish classes and even government, but will retain administration. But what is administration unless it operates within an institutional framework? I believe that eventually the USSR and communist nations generally will see the need

deliberately to train the type of person I have described here even if collectively they do constitute an elite group.

The kind of person I mean is the political economist who understands principle and policy and the concept of the public interest, who is incorruptible, and who most of all, has competence. I believe that a major universal on a world basis is competence. It is not political views or position or name or appearance or who one's parents were. It is competence defined so broadly as to include all the basic concepts that I have dealt with in trying to explain the nature of the political economy.

Applying this analysis to administration, I conclude that the new political economy is the private and the public sectors working together for the public good. Political economy is an organism with a structure that must be managed by people who are both realistic and skilled in dealing with policy. In order to grow, the national economy must be managed with the greatest possible freedom so that people will remain enterprising and energetic instead of becoming bureaucratic, rigid, and dull. Such freedom is encouraged by people who combine a strong competitive instinct with a strong sense of the public interest. The nation best able to promote this freedom and this balance is the one that will excel in competition on a world basis.

An urgent need, therefore, is for our universities to develop this concept of political economy and to train men and women to instrument it. To this end there may have to be a kind of revolution in the social sciences. Political science and economics must be recombined. Public administration must be brought into the compound and not left outside as a separate field. There must also be an increasing reliance on sociology and psychology.

I believe further, that whatever the stage of economic development, the nation that soonest adopts the concept of political economy will enjoy the greatest advantages. The concept will also influence the administrative

organization of government. For one thing, it will be found that comprehensive economic planning from a high central source places too heavy a burden on busy officials, that emphasis comes to be on the plan itself instead of on its execution. In accordance with the political economy concept, a better approach is to emphasise the central planning of policy in separate units connected with all the larger ministries such as treasury, public works, natural resources, transportation, education, and the like. Public officials will then be chosen largely on the basis of their skill in planning policy within these units. The opportunities for outstanding minds and executives in these areas will be enormous.

A major problem in comprehensive planning is how to co-ordinate the work of many specialists so as to produce an effective overall plan, to control the areas that need to be controlled in order to promote economic growth. High level comprehensive planning is too cumbersome a method; a few well-trained policy officials making use of the political economy concept at key points in the government—the most important of whom might be attached to the cabinet itself—are much more likely to succeed.

Finally, I would repeat that the principal limiting factor at all stages of growth is the human one. As yet, some countries simply do not have enough people of the calibre needed for the political economy approach. The highest priority at all stages of economic growth, therefore, is the development and training of large numbers of men and women who deserve to be called political economists.



